



AGENDA
CITY OF SEASIDE
PLANNING COMMISSION

REGULAR MEETING
City Hall
440 Harcourt Avenue
Wednesday, May 13, 2020
7:00 PM

Pursuant to Governor Newsom's Executive Orders [N-29-20](#) and [N-33-20](#), and to do all we can to help slow the spread of COVID-19 (coronavirus) City of Seaside meetings will be adapted in the following ways:

MEETING ACCESS: Meetings of the Seaside City Council and its Boards and Commissions will be conducted with virtual (electronic) participation only. Members of the public may watch the live stream of the City Council and Boards and Commission meetings at <https://bit.ly/SeasideYouTube>

For this meeting only, Members of the public can participate in a Zoom Webinar.

To Join the Zoom Webinar Meeting, click on this link:
<https://us02web.zoom.us/j/88342101058?pwd=ZFB6MmNQTGU5UWRMV2NDSjR4TjRFUT09>
or copy and paste the link into your browser. If your computer does not have audio, you will also need to join the meeting via phone.

To Participate via phone you can call the number below and enter the webinar ID number and password when prompted: (669) 900-9128

Webinar ID: 883 4210 1058 Password: 460944

PUBLIC COMMENTS: Members of the public may participate before and during each meeting by submitting comment(s) to cityclerk@ci.seaside.ca.us. The clerk will read each received public comment aloud into the record at the designated time, subject to time limits that may be imposed pursuant to the Brown Act. In the subject line of a public comment email, please specify the meeting body and date and indicate the relevant item number or "general" to help staff easily receive and organize public comments.

1. **CALL TO ORDER**
2. **ROLL CALL - ESTABLISHMENT OF QUORUM**
3. **PLANNING COMMISSION**

John Owens
Michael Spalletta
Keith Dodson
Arlington La Mica
Dave Evans
William Silva

Chair
Vice Chair
Commissioner
Commissioner
Commissioner
Commissioner

4. REVIEW OF AGENDA

If there are any items that arose after the 72-hour posting deadline, this is the point in the meeting where a vote may be taken to add the item to the agenda. (A 2/3-majority vote is required).

5. PUBLIC COMMENT

Members of the public wishing to address the City Council on matters within the jurisdiction of the City of Seaside, but not on this agenda, may do so during the Public Comment period for up to three minutes. Public Comments on specific agenda items are heard under that item. For the public record, please state your name.

6. APPROVAL OF MINUTES

A. APRIL 1ST AND APRIL 22, 2020

7. BUSINESS ITEMS

- A. MINOR USE PERMIT APPLICATION NO. MUP-20-01:William Kheiu, property owner, and David Vargas, Applicant, are requesting a Minor Use Permit to operate an indoor cannabis manufacturing business within Suite 21 of the professional office building generally located at 911-915 Hilby Avenue (APN# 012-5362-051) in the Community Commercial (CC) Zoning District. In accordance with the California Environmental Quality Act (CEQA), the project is Categorically Exempt Class 1, Section 15301(a).**

RECOMMENDATION: In accordance with Title 19 of the Seaside Municipal Code, a license for the cannabis manufacturing is subject to the issuance of a Minor Use Permit by the Zoning Administrator. However, in accordance with Seaside Municipal Code section 17.60.050, Table 5-1: Review Authority, footnote 2, the Community Development Director deferred the permit review and decision of Minor Use Permit application 20-01 from the authority of the Zoning Administrator and referred the permit review and decision to the Planning Commission.

It is recommended that the Planning Commission receive and consider the staff report, staff presentation, applicant comments, public comments, and findings in the resolution to determine whether or not to grant the Minor Use Permit in accordance with the draft Resolution provided as Attachment 1 to the staff report.

8. REPORTS FROM STAFF

9. REPORTS FROM COMMISSIONERS

10. ADJOURNMENT

Next Regularly Scheduled Meeting:
May 27, 2020
Seaside City Hall
7:00 PM

The City of Seaside is committed to providing accessible facilities and accommodating people with disabilities in all of its services programs and activities. If special considerations are needed by any person to fully participate in this meeting, contact the City Clerk at 899-6707 no fewer than two business days prior to the meeting to allow reasonable arrangements. Agendas are posted at:

<http://www.ci.seaside.ca.us/129/City-Council-Committee-Agendas>

Agenda-related writings or documents provided during public meetings are available for public inspection during the meeting or from the office of the City Clerk. This agenda is posted in compliance with California Government Code Section 54954.2(a) or Section 54956.



DRAFT MINUTES

CITY OF SEASIDE
PLANNING COMMISSION

SPECIAL VIRTUAL ONLY MEETING
COUNCIL CHAMBER

Wednesday, April 1, 2020
7:00 PM

1. CALL TO ORDER

Chair Owens called the meeting to order.

2. ROLL CALL - ESTABLISHMENT OF QUORUM

PRESENT: Huynh, Silva, Owens, Spalletta, La Mica, Dodson, Evans
ABSENT: None

3. PLANNING COMMISSION

PRESENT: Huynh, Silva, Owens, Spalletta, La Mica, Dodson, Evans
ABSENT: None

4. REVIEW OF AGENDA

Item 7B was continued to the next meeting.

5. PUBLIC COMMENT

None.

6. APPROVAL OF MINUTES

None.

7. BUSINESS ITEMS

A. ADOPTION OF RESOLUTION AMENDING THE 2004 SEASIDE GENERAL PLAN TO INCORPORATE THE MIDTERM REVIEW OF THE 5TH CYCLE (2015-2023) HOUSING ELEMENT TO THE GENERAL PLAN. THE MIDTERM REVIEW IS EXEMPT FROM CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) PER 15061(b)(3).

Consultant Veronica Tam presented the report explaining the purpose of the Housing Element is a of seven mandated elements of a General Plan per State General Plan Guidelines and must address the existing and projected housing needs for all economic segments of the City. State law requires that Housing Elements be updated every five to seven years based on a schedule set by legislation. The Housing Element Update, once adopted by Council and certified by HCD, will allow the City to gain compliance with State Housing Law. This update provides the City with a coordinated and

comprehensive strategy for promoting the production of safe, decent, and affordable housing for all within the Seaside community. Ms. Tam explained the details of the Housing Element Update specifically outlining the housing policy and goals plan and the technical appendices for housing needs, constraints, resources and community engagement. In response to HCD direction, the City received in March 2020 on its preliminary review of the draft Housing Element, the City noted that it will need to update the Zoning Code to be consistent with State regulations regarding inclusionary and density bonus housing. The proposed plan has been reviewed for consistency with the general plan. Ms. Tam answered questions from the Commission. There were no public comments received.

On motion by Commissioner Silva and seconded by Commissioner Dodson and passed by the following vote the Planning Commission adopt a resolution approving a General Plan Amendment for the 5th Cycle 2015-2023 Housing Element Update.

RESULT:	Adopted
AYES:	John Owens, Michael Spalletta, Keith Dodson, Arlington La Mica, Dave Evans, William Silva, Danny Huynh
NOES:	None

B. USE PERMIT APPLICATION NO. UP-20-02 AND SEASIDE MUNICIPAL CODE AMENDMENT SMA-20-01: AUG, LLC., PROPERTY OWNER, AND. BARGHAUSEN CONSULTING ENGINEERS, INC., APPLICANT, ARE REQUESTING A USE PERMIT AND A TEXT AMENDMENT TO CHAPTER 17 OF THE SEASIDE MUNICIPAL CODE TO ALLOW FOR THE CONSTRUCTION OF A 24-PUMP GASOLINE FUELING STATION ON A 0.98-ACRE SITE. THE TEXT AMENDMENT WOULD CONSIST OF ADDING A GASOLINE-FUELING STATION AS A USE PERMIT UNDER SECTION 17.14.030.B – TABLE 2-4 (ALLOWED LAND USES AND PERMITTED USES) IN THE AUTOMOTIVE REGIONAL COMMERCIAL (CA) ZONING DISTRICT. THE USE PERMIT FOR THE PROJECT WOULD CONSIST OF CONVERTING AN EXISTING AUTO DEALERSHIP PARKING LOT CURRENTLY BEING USED AS A PARKING LOT FOR A NEW CAR DEALERSHIP INTO THE PROPOSED COSTCO WHOLESALE GASOLINE-FUELING STATION. THE PROJECT SITE IS LOCATED AT THE NORTHEASTERN CORNER OF DEL MONTE BOULEVARD AND AUTOCENTER PARKWAY, GENERALLY LOCATED AS PART OF THE CYPRESS COAST FORD NEW CAR DEALERSHIP LOCATED AT 4 GEARY PLAZA (APN# 011-523-018) IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES 15072, A MITIGATED NEGATIVE DECLARATION HAS BEEN PREPARED FOR THE PROJECT AND TEXT AMENDMENT.

Action: Continued

8. REPORTS FROM COMMISSIONERS

None.

9. REPORTS FROM STAFF

Economic Development Director Stearns encouraged the Commission and the public to fill out the 2020 Census.

10. ADJOURNMENT

On motion, the meeting was adjourned at 7:46 pm.

Respectfully submitted,

Lesley Milton, City Clerk

John Owens, Chair



DRAFT MINUTES

CITY OF SEASIDE
PLANNING COMMISSION

VIRTUAL MEETING
COUNCIL CHAMBER

Wednesday, April 22, 2020
7:00 PM

1. **CALL TO ORDER**

Chair Owens called the meeting to order at 7:00 PM.

2. **ROLL CALL - ESTABLISHMENT OF QUORUM**

3. **PLANNING COMMISSION**

PRESENT: Huynh, Silva, Owens, Spalletta, La Mica, Dodson, Evans
ABSENT: None

4. **REVIEW OF AGENDA**

5. **PUBLIC COMMENT**

None.

6. **APPROVAL OF MINUTES**

A. APRIL 1, 2020

On motion by Commissioner La Mica and seconded by Commissioner Silva and passed by the following vote the Planning Commission continued the item to the next meeting.

RESULT: ***Authorized***

AYES: *John Owens, Michael Spalletta, Keith Dodson, Arlington La Mica, Dave Evans, William Silva, Danny Huynh*

NOES: *None*

7. **BUSINESS ITEMS**

A. SEASIDE MUNICIPAL CODE AMENDMENT SMA-20-02: THE CITY OF SEASIDE, APPLICANT, IS PROPOSING TEXT AMENDMENTS TO THE SEASIDE MUNICIPAL CODE (SMC) CHAPTERS 17.52, 17.98, AND 17.14, TABLE 2-4. THE AMENDMENTS WOULD REPEAL SPECIFIC STANDARDS FOR MECHANICAL AND ELECTRONIC GAMES AND GAME CENTERS (SMC 17.52), ADD LAND USE DEFINITIONS (SMC 17.98), AND MODIFY THE PERMITTING REQUIREMENTS FOR MECHANICAL AND ELECTRONIC GAMES AND GAME CENTERS IN THE CMX, CC, AND CRG ZONES (SMC 17.14.030.B – TABLE 2-4: ALLOWED LAND USES AND PERMITTED USES). IN ACCORDANCE WITH

THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES THE PROPOSED TEXT AMENDMENTS ARE EXEMPT PER 15061(B)(3)

Associate Planner Rocha presented the report explaining the recommendation to repeal the Municipal Code Section that prohibits electronic games and game centers. By modifying the code sections, it would re-define electronic games and game centers and modify the permitting process to only require administrative approval as opposed to a use permit. Ms. Rocha spoke to the two recent applications that have triggered public hearings to approve. She further noted that the Police Department has indicated that this change of use would not affect youth truancy. The original deterring intent in 1982 when the regulation was established was to preserve public health for youth in Seaside. On question by Commissioners, staff indicated that curfews for minors, noise regulations and public nuances are already addressed in other sections of the code.

The commissioners agreed the code was out of date for the industry and they had no identified issues with the amendment.

On motion by Commissioner Dodson and seconded by Commissioner La Mica and passed by the following vote the Planning Commission approved the staff recommendation and requested the recommendation be forwarded to the City Council for adoptions

RESULT: ***Approved***

AYES: *John Owens, Michael Spalletta, Keith Dodson, Arlington La Mica, Dave Evans, William Silva, Danny Huynh*

NOES: *None*

B. USE PERMIT APPLICATION NO. UP-20-02 AND SEASIDE MUNICIPAL CODE AMENDMENT SMA-20-01: AUG, LLC., PROPERTY OWNER, AND. BARGHAUSEN CONSULTING ENGINEERS, INC., APPLICANT, ARE REQUESTING A USE PERMIT AND A TEXT AMENDMENT TO CHAPTER 17 OF THE SEASIDE MUNICIPAL CODE TO ALLOW FOR THE CONSTRUCTION OF A 24-PUMP GASOLINE FUELING STATION ON A 0.98-ACRE SITE. THE TEXT AMENDMENT WOULD CONSIST OF ADDING A GASOLINE-FUELING STATION AS A USE PERMIT UNDER SECTION 17.14.030.B – TABLE 2-4 (ALLOWED LAND USES AND PERMITTED USES) IN THE AUTOMOTIVE REGIONAL COMMERCIAL (CA) ZONING DISTRICT. THE PROJECT SITE IS LOCATED AT THE NORTHEASTERN CORNER OF DEL MONTE BOULEVARD AND AUTOCENTER PARKWAY, GENERALLY LOCATED AS PART OF THE CYPRESS COAST FORD NEW CAR DEALERSHIP LOCATED AT 4 GEARY PLAZA (APN# 011-523-018) IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES 15072, A MITIGATED NEGATIVE DECLARATION HAS BEEN PREPARED FOR THE PROJECT AND TEXT AMENDMENT.

Senior Planner Medina presented the item explaining the recommendation to approve a conditional use permit for a Costco 24-pump gas fueling station and associated code amendments necessary for the approval of the project. The service station would be operated by Costco Wholesale and would be a membership service station at which gasoline products would only be available for purchase by active Costco members. The project site is located 400 ft. east of the existing Costco Warehouse, at 801 Tioga Avenue in Sand City. Mr. Medina provided the background on the item, the location of the site and the history of the site and explained the proposed text amendments, noting they are consistent with the current zoning and general plan. If approved, this project would provide a revenue source and enhance the area of the property and the surrounding properties. He further noted that the City processed a Notice of Intent for

the Mitigated Negative Declaration for CEQA and all proper noticing requirements have been completed. Mitigation measures from the initial study address cultural, noise, and transportation. Sean Anderson presented representing the project team, provided a presentation detailing the orientation of the site that maximized total vehicles on-site and flow of vehicles through the site. He noted the fuel system is state of the art that meets all state and water board requirements for underground storage of fuel and emissions and labor control. Vapor control technology complies with air resource control requirements. Mr. Medina and Mr. Anderson answered questions from the Commission.

The Commission questioned the total estimated number of cars servicing this station and expressed displeasure about not having onsite restrooms. The applicant indicated the model anticipates 317 trips along Del Monte per day and noted that this project was a planned improvement for TAMC and has been included in their plan program impacts. Staff explained the purpose for not having onsite restrooms due to water access and a moratorium on adding water meters to sites. Chair Owens requested and the applicant agreed to find an appropriate way to screen onsite porta-potties from public view, and consider permanent restrooms in the future or a composting toilet option. Commissioner Dodson expressed concern about signage to notify people where the station is in relation to the lot. The Commissioners spoke in support of the project and shielding the restrooms but they expressed misgivings about the traffic impacts of the study, believing it to be more significant than proposed.

There were no public comments on the item.

On motion by Commissioner Silva, seconded by Commissioner La Mica and passed unanimously, the Planning Commission approving resolutions recommending that the City Council; adopt the Mitigated Negative Declaration for proposed text amendments; approve the proposed text Amendments proposed for Application SMA-20-01; and approve Use Permit Application UP-20-01 for the construction of a 24-pump service station in the Automotive Regional Commercial Zoning District with the added recommendations that additional conditions for additional street striping for pedestrian safety and a better plan for the bathroom.

RESULT: **Approved**

AYES: John Owens, Michael Spalletta, Keith Dodson, Arlington La Mica, Dave Evans, William Silva, Danny Huynh

NOES: None

8. REPORTS FROM COMMISSIONERS

None.

9. REPORTS FROM STAFF

None.

10. ADJOURNMENT

Meeting was adjourned at 8:15 pm.

Respectfully submitted,

Lesley Milton, City Clerk

John Owens, Chair



CITY OF SEASIDE STAFF REPORT

Item No.: 7.A.

TO: Planning Commission

BY: Beth Rocha, Associate Planner

DATE: May 13, 2020

SUBJECT: **MINOR USE PERMIT APPLICATION NO. MUP-20-01:William Kheiu, property owner, and David Vargas, Applicant, are requesting a Minor Use Permit to operate an indoor cannabis manufacturing business within Suite 21 of the professional office building generally located at 911-915 Hilby Avenue (APN# 012-5362-051) in the Community Commercial (CC) Zoning District. In accordance with the California Environmental Quality Act (CEQA), the project is Categorically Exempt Class 1, Section 15301(a).**

PURPOSE & RECOMMENDATION

In accordance with Title 19 of the Seaside Municipal Code, a license for the cannabis manufacturing is subject to the issuance of a Minor Use Permit by the Zoning Administrator. However, in accordance with Seaside Municipal Code section 17.60.050, Table 5-1: Review Authority, footnote 2, the Community Development Director deferred the permit review and decision of Minor Use Permit application 20-01 from the authority of the Zoning Administrator and referred the permit review and decision to the Planning Commission.

It is recommended that the Planning Commission receive and consider the staff report, staff presentation, applicant comments, public comments, and findings in the resolution to determine whether or not to grant the Minor Use Permit in accordance with the draft Resolution provided as Attachment 1 to the staff report.

BACKGROUND

Cannabis Regulations and Existing Businesses in Seaside

On September 21, 2017, the City Council unanimously moved to adopt a second reading of the ordinance amending the Seaside Municipal Code adding chapter 19, which sets forth the regulations governing commercial and adult use cannabis

activities, including cultivation, dispensaries, manufacturing, research and development, resting, transportation and distribution within the City of Seaside. The city has permitted six cannabis retail businesses, two of which also have cannabis manufacturing components, and five cannabis manufacturing businesses, two of which are currently in operation.

California Environmental Quality Act

In accordance with the California Environmental Quality Act (CEQA), the project is Categorically Exempt Class 1, Section 15301(a). The proposed development will consist of converting an existing commercial suite into a cannabis manufacture facility and will not require any exterior alterations to the site or change in intensity of the site, therefore the project involves negligible or no expansion of an existing use.

PROJECT DESCRIPTION

The project site is located at 911 Hilby Avenue, Suite 21, and the cannabis manufacturing business is proposed to be within an existing two-story commercial building. The existing commercial building is two stories, with 4,212.3 sq.ft. on the lower floor and 9,837.7 sq.ft on the upper floor for a total 14,050 sq.ft. The proposed cannabis manufacturing use would be located in a 2,450sq.ft. suite located on the upper floor of a multi-tenant commercial building. Suite 21 is located on a portion of the second floor where there are no suites located below, on the first floor. Currently, there are 10 businesses within the commercial building:

Edmundo Fimbres, Optometrist
Legal Services for Seniors
Seaside Dental Group
Wenona Tax Service
Hilby Dental Lab
State Farm - Jim Reinhart, Agent
Passport Health
NCI Affiliates, INC
Athena Occupational Medicine
Athena Medical Group

The adjoining land uses consist of multi and single family residential dwellings to the north and east, commercial retail businesses to the west and south. 911-915 Hilby Location Map and Street View Photos are provided as Attachments 2 and 3, respectively.

The proposed project is for the volatile manufacturing and distribution of adult use medical and recreational cannabis products. The proposed number of full-time employees is approximately 5-7 upon start-up. Operating hours will be from 8AM to 4:30PM, Monday-Saturday. One vehicle will be kept on-site for the secure transport of cannabis products and a total of five parking spaces will be designated for the business. The products to be manufactured and distributed are from the cannabis

plant. The cannabis product to be manufactured and distributed through this facility will be as follows: Flowers processed, buds trimmed; concentrates extracted from active components of cannabis; and topical cannabis products such as creams, spray, balms and ointments. See applicant submitted Project Description (Exhibit A to Attachment 5).

STAFF ANALYSIS

In accordance with Seaside Municipal Code (SMC) section 19.04.010.E. A minor use permit for testing, manufacturing and research and development of cannabis and cannabis products shall not be granted by the city unless all of the following findings are made based on substantial evidence:

1. The activity, as proposed, will comply with all of the requirements of the state and city, and any additional conditions of license for the testing, manufacturing, or research and development of cannabis or cannabis products, including approval of a cannabis development/operating agreement by and between the city and owner.

Evidence: *The project site is located at 911 Hilby Avenue within the Community Commercial (CC) Zoning District. Locational restrictions at the local and state levels require that any cannabis licensee being located a minimum of 600 feet from a K-12 school or youth center. The nearest youth center is the "Seaside Youth Center" located at 1136 Wheeler Street to the southeast. This site is approximately 800 feet from the project site. The nearest K-12 school is Auburn's House Montessori School located approximately 825 feet to the east at 1242 Siddall Street.*

2. The use, as approved and conditioned, will not result in significant unavoidable impacts on the environment.

Evidence: *The project will include conditions to require the approval of a security plan by the Chief of Police, and the installation of air filtration systems to mitigate potential odors from the manufacturing and processing of cannabis (Exhibit C to Attachment 5 and additional equipment specifications provided as Exhibit D to Attachment 5). Additionally, the building department has requested supplemental information regarding the equipment and potential noise, vibration, fumes, odors at the proposed business to assess the potential impacts on the adjoining businesses.*

3. The use includes adequate measures that minimize use of water at the site.

Evidence: *The project will include a condition requiring that all water fixtures are retrofitted to comply with the water efficiency standards of the Monterey Peninsula Water Management District.*

4. Any cultivation includes adequate quality control measures to ensure cannabis cultivated at the site meets industry standards.

Evidence: *No cultivation will occur with the cannabis license.*

5. The use shall include adequate measures that address the federal enforcement priorities for cannabis activities including restricting access to minors, and ensuring that cannabis and cannabis products are not supplied to unlicensed and unpermitted persons within the state and not distributed out of state.

Evidence: *The cannabis development/operating agreement by and between the city and owner will specify parameters that the manufacturing process must adhere to. The Seaside Police Department will maintain oversight over this operating agreement.*

6. The applicant, owner, and permittees agree to submit to, and pay for, inspections of the operations and relevant records or documents necessary to determine compliance with this chapter from any enforcement officer of the city of Seaside or their designee.

Evidence: *The cannabis development/operating agreement by and between the city and owner will specify parameters that the manufacturing process must adhere to in accordance with local and state laws.*

7. Any person testing, manufacturing or performing research and development operations using cannabis shall obtain a valid and fully executed commercial cannabis development/operating agreement prior to commencing operations and must maintain such agreement in good standing in order to continue operations.

Evidence: *The cannabis development/operating agreement by and between the city and owner will specify parameters that the manufacturing process must adhere to in accordance with local and state laws.*

8. The owner shall be responsible for ensuring that all commercial cannabis activities at the site operate in good standing with all permits and licenses required by state law. Failure to take appropriate action to evict or otherwise remove permittees and persons conducting commercial cannabis activities at the site who do not maintain permits or licenses in good standing with the city, county or state may be grounds to commence an action to suspend or revoke the minor use permit pursuant to Chapter 17.80 SMC, or to revoke the required cannabis development/operating agreement.

Evidence: *The cannabis development/operating agreement by and between the city and owner will specify parameters that the manufacturing process must adhere to in accordance with local and state laws.*

Additionally, SMC 17.62.070.F requires the review authority make the following findings before issuing a minor use permit:

1. The proposed use is allowed within the applicable zone and complies with all other applicable provisions of this Zoning Ordinance and the Municipal Code.

Evidence: *This project is located within the CC Zoning District where a cannabis*

manufacturing facility may be established with minor use permit approval.

Evidence: *The applicant will be required to provide sufficient security measures to both deter and prevent unauthorized entrance into the facility and eliminate any unauthorized loitering inside and outside of the facility.*

2.The proposed use is consistent with the General Plan and any applicable specific plan.

Evidence: *The site is designated as Community Commercial by the 2004 Seaside General Plan. The following Goals and Policies would apply:*

Land Use Element Goal LU-1: Promote a mixture of land uses and a balance of jobs and housing to support a community in which people can live, work, and play.

Land Use Element Policy LU-1.1: The proposed use would serve to implement and diversify the land uses within the Community Commercial land use category and improve the City's job-housing balance.

Land Use Element Policy LU-1.2: The proposed use would serve to provide additional jobs to improve the City's job-housing balance.

Land Use Element Policy LU-1.3: The cannabis manufacturing facility would serve to establish a regional commodity within the City of Seaside that will provide a substantial investment within the community.

Land Use Element Goal LU-2: Revitalize existing commercial areas.

Land Use Element Policy LU-2.1: The proposed project will serve to revitalize an existing vacant commercial space in the community.

3.The design, location, size, and operating characteristics of the proposed activity are compatible with the existing and planned future land uses in the vicinity.

Evidence: *The proposed cannabis manufacturing facility will meet the economic and jobs/housing needs of the community consistent with the Seaside General Plan and improve the overall business character with the infusion of monetary investment in the infrastructure of the site.*

4.The site is physically suitable for the type, density and intensity of use being proposed, including access, utilities, and the absence of physical constraints.

Evidence: *The project site is served by existing water, wastewater, and electrical infrastructure and facilities with adequate capacity to serve the proposed project. The proposed conversion of a commercial suite to a cannabis manufacturing facility with interior changes conforms to Land Use Elements of the Seaside General Plan.*

5.Granted the permit would not be detrimental to the public interest, health, safety, convenience, or welfare, or materially injurious to persons, property, or improvements in the vicinity and zone district where the manufacturing facility will provide for a community facility that is safe and attractive for a cannabis land use.

Evidence: *The proposed conversion of a commercial suite to a cannabis*

manufacturing facility would not be detrimental to the public health, safety and general welfare of the people of the City and surrounding neighborhood. Additionally, the building department has requested supplemental information regarding the equipment and potential noise, vibration, fumes, odors at the proposed business to assess the potential impacts on the adjoining businesses. Furthermore, to ensure neighborhood compatibility with the residential dwellings to the north and east and commercial retail businesses to the west and south, an air filtration system will be installed to eliminate potential impacts associated with odors (Exhibit C to Attachment 5). The following description of the filtration system was taken from the applicant's Project Description (Exhibit A to Attachment 5):

Air scrubbers and filtration systems will be constructed and installed within the existing ventilation system to eliminate cannabis odor from escaping and to ensure that odors are undetectable outside of the facility. The installation of the pre-fabricated C1-D1 unit will require the installation of rooftop exhaust fans. The odor control system will revolve around the rooftop-mounted exhaust fans. In the system, as air is drawn into the filters, odors are trapped by the activated charcoal and discharged to the exterior.

In accordance with Seaside Municipal Code sections 19.04.010.E and 17.62.070.F, the staff analysis includes evidence for the required findings for the issuance of a Minor Use Permit.

PUBLIC COMMENTS

As of the publication of this agenda packet and staff report on Friday, May 8, 2020 the City has received six public comments in opposition to the proposed cannabis manufacturing business (See Attachment 4: Public Comments).

ATTACHMENTS

1. Attachment 1: Resolution
 2. Attachment 2: Location Map
 3. Attachment 3: Street View Photos
 4. Attachment 4: Public Comments
 5. Attachment 5: Project Plans
 6. Exhibit A to Attachment 5: Project Description
 7. Exhibit B to Attachment 5: Product Specifications
 8. Exhibit C to Attachment 5: Air Filtration
 9. Exhibit D to Attachment 5: Additional Equipment
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DRAFT RESOLUTION NO. 20-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SEASIDE, STATE OF CALIFORNIA, APPROVING A MINOR USE PERMIT TO ALLOW A CANNABIS MANUFACTURING FACILITY WITH TRANSPORTATION/ DISTRIBUTION/ ASEMBLY LOCATED SPECIFICALLY AT 911 HILBY AVENUE, SUITE 21 IN A COMMERICAL BUILDING ADDRESSED AS 911-915 HILBY AVENUE IN THE COMMUNITY COMMERCIAL (CC) ZONING DISTRICT.

WHEREAS, William Khieu, property owner, and David Vargas, applicant, have applied for a Minor Use Permit for:

- A. The establishment of a Cannabis Manufacturing facility with Transportation/ Distribution/ Assembly.

WHEREAS, the proposed project requires discretionary approval, and it is the responsibility of the Planning Commission to consider and weigh the merits of the application and public input in relation to the policies, standards and intent of the Seaside General Plan and Seaside Municipal Code; and

WHEREAS, the Planning Commission considered oral comments and written information concerning the proposed amendment at a duly noticed public hearing at a regular public meeting held on May 13, 2020; and

WHEREAS, the project is a Categorically Exempt, Class 1, Section 15301 meeting the following conditions:

- a) The proposed development will consist of converting an existing commercial suite into a cannabis manufacture facility and will not require any exterior alterations to the site or change in intensity of the site, therefore the project involves negligible or no expansion of an existing use.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission hereby finds and determines:

- 1. The activity, as proposed, will comply with all of the requirements of the state and city, and any additional conditions of license for the testing, manufacturing, or research and development of cannabis or cannabis products, including approval of a cannabis development/operating agreement by and between the city and owner.**

Evidence: *The project site is located at 911 Hilby Avenue within the Community Commercial (CC) Zoning District. Locational restrictions at the local and state levels require that any cannabis licensee being located a minimum of 600 feet from a K-12 school or youth center. The nearest youth center is the "Seaside Youth Center" located at 1136 Wheeler Street to the southeast. This site is approximately 800 feet from the project site. The nearest K-12 school is Auburn's House Montessori School located approximately 825 feet to the east at 1242 Siddall Street.*

- 2. The use, as approved and conditioned, will not result in significant unavoidable impacts on the environment.**

Evidence: *The project will include conditions to require the approval of a security plan by the Chief of Police, and the installation of air filtration systems to mitigate potential odors from the manufacturing and processing of cannabis (Exhibit C to Attachment 5). Additionally, the building department has requested supplemental information regarding the equipment and potential noise, vibration, fumes, odors at the proposed business to assess the potential impacts on the adjoining businesses.*

3. The use includes adequate measures that minimize use of water at the site.

Evidence: *The project will include a condition requiring that all water fixtures be retrofitted to comply with the water efficiency standards of the Monterey Peninsula Water Management District.*

4. Any cultivation includes adequate quality control measures to ensure cannabis cultivated at the site meets industry standards.

Evidence: *No cultivation will occur with the cannabis license.*

5. The use shall include adequate measures that address the federal enforcement priorities for cannabis activities including restricting access to minors, and ensuring that cannabis and cannabis products are not supplied to unlicensed and unpermitted persons within the state and not distributed out of state.

Evidence: *The cannabis development/operating agreement by and between the city and owner will specify parameters that the manufacturing process must adhere. The Seaside Police Department will maintain oversight over this operating agreement.*

6. The applicant, owner, and permittees agree to submit to, and pay for, inspections of the operations and relevant records or documents necessary to determine compliance with this chapter from any enforcement officer of the city of Seaside or their designee.

Evidence: *The cannabis development/operating agreement by and between the city and owner will specify parameters that the manufacturing process must adhere to in accordance with local and state laws.*

7. Any person testing, manufacturing or performing research and development operations using cannabis shall obtain a valid and fully executed commercial cannabis development/operating agreement prior to commencing operations and must maintain such agreement in good standing in order to continue operations.

Evidence: *The cannabis development/operating agreement by and between the city and owner will specify parameters that the manufacturing process must adhere to in accordance with local and state laws.*

8. The owner shall be responsible for ensuring that all commercial cannabis activities at the site operate in good standing with all permits and licenses required by state law. Failure to take appropriate action to evict or otherwise remove permittees and persons conducting commercial cannabis activities at the site who do not maintain permits or licenses in good standing with the city, county or state may be grounds to commence an action to suspend or revoke the minor use permit pursuant to Chapter [17.80](#) SMC, or to revoke the required cannabis development/operating agreement.

Evidence: *The cannabis development/operating agreement by and between the city and owner will specify parameters that the manufacturing process must adhere to in accordance with local and state laws.*

9. The proposed use is allowed within the applicable zone and complies with all other applicable provisions of this Zoning Ordinance and the Municipal Code.

Evidence: *This project is located within the CC Zoning District where a cannabis manufacturing facility may be established with minor use permit approval.*

Evidence: *The applicant will be required to provide sufficient security measures to both deter and prevent unauthorized entrance into the facility and eliminate any unauthorized loitering inside and outside of the facility.*

10. The proposed use is consistent with the General Plan and any applicable specific plan.

Evidence: *The site is designated as Community Commercial by the 2004 Seaside General Plan. The following Goals and Policies would apply:*

Land Use Element Goal LU-1: Promote a mixture of land uses and a balance of jobs and housing to support a community in which people can live, work, and play.

Land Use Element Policy LU-1.1: The proposed use would serve to implement and diversify the land uses within the Community Commercial land use category and improve the City's job-housing balance.

Land Use Element Policy LU-1.2: The proposed use would serve to provide additional jobs to improve the City's job-housing balance.

Land Use Element Policy LU-1.3: The cannabis manufacturing facility would serve to establish a regional commodity within the City of Seaside that will provide a substantial investment within the community.

Land Use Element Goal LU-2: Revitalize existing commercial areas.

Element Policy LU-2.1: The proposed project will serve to revitalize an existing vacant commercial space in the community.

11. The design, location, size, and operating characteristics of the proposed activity are compatible with the existing and planned future land uses in the vicinity.

Evidence: *The proposed cannabis manufacturing facility will meet the economic and jobs/housing needs of the community consistent with the Seaside General Plan and improve the overall business character with the infusion of monetary investment in the infrastructure of the site.*

12. The site is physically suitable for the type, density and intensity of use being proposed, including access, utilities, and the absence of physical constraints.

Evidence: *The project site is served by existing water, wastewater, and electrical infrastructure and facilities with adequate capacity to serve the proposed project. The*

proposed conversion of a commercial suite to a cannabis manufacturing facility with interior changes conforms to Land Use Elements of the Seaside General Plan.

13. Granting the permit would not be detrimental to the public interest, health, safety, convenience, or welfare, or materially injurious to persons, property, or improvements in the vicinity and zone district where the manufacturing facility will provide for a community facility that is safe and attractive for a cannabis land use.

Evidence: *The proposed conversion of a commercial suite to a cannabis manufacturing facility would not be detrimental to the public health, safety and general welfare of the people of the City and surrounding neighborhood. Additionally, the building department has requested supplemental information regarding the equipment and potential noise, vibration, fumes, odors at the proposed business to assess the potential impacts on the adjoining businesses. Furthermore, to ensure neighborhood compatibility with the residential dwellings to the north and east and commercial retail businesses to the west and south, an air filtration system will be installed to eliminate potential impacts associated with odors (Exhibit C to Attachment 5). The following description of the filtration system was taken from the applicant's Project Description (Exhibit A to Attachment 5):*

Air scrubbers and filtration systems will be constructed and installed within the existing ventilation system to eliminate cannabis odor from escaping and to ensure that odors are undetectable outside of the facility. The installation of the pre-fabricated C1-D1 unit will require the installation of rooftop exhaust fans. The odor control system will revolve around the rooftop-mounted exhaust fans. In the system, as air is drawn into the filters, odors are trapped by the activated charcoal and discharged to the exterior.

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the Planning Commission approves Minor Use Permit Application No. UP-20-01 subject to the following conditions:

Project Specific

Planning:

1. Except as modified by required conditions of approval, the permittee shall have the right to operate a Cannabis Manufacturing Facility with transportation/distribution/assembly in accordance with the project plans stamped "Received by the City of Seaside February 13, 2020". Supplemental project materials are provided as Exhibits to Attachment 5.
2. Operating hours are to be 8AM to 4:30PM, Monday - Saturday.
3. Prior to the issuance of a Certificate of Occupancy, the applicant must submit a security plan to the Chief of Police for review and approval. The security will detail security cameras, storage of cannabis product, delivery/distribution.

Building:

1. As occupancy classifications relating to this particular use, depend upon various factors including the presence of combustible materials, types and quantities of solvents and other unidentified factors, affecting fire separation requirements to adjoining businesses, distances to property lines, egress requirements, fire alarms and sprinkler systems,

therefore the actual approval at the proposed location cannot fully be determined without complete details.

2. Complete construction drawings prepared by a licensed design professional and/or registered engineer must be submitted to the Building Department for plan check review and approval prior to the issuance of any building, plumbing, electrical or mechanical permit related to the proposed business.
4. Construction plans must clearly identify and justify all Occupancy Types as defined by the 2019 California Building Code, chapter 3, any special requirements based upon occupancy in chapter 4, and compliance with the separation requirements of adjoining occupancies as identified in Table 508.4 of the 2019 CBC. In addition to occupancy separations, plans must clearly identify egress, ventilation, electrical loads, backflow protection, waste disposal and/or recycling of contaminants as applicable.
5. Identify how any proposed security features and procedures will effectively operate within a mixed-use multi-tenant building without negativity affecting adjoining business and their operations including access and egress, clientele, etc.
6. Identify how any related equipment, noise, vibration, fumes, odors at the proposed business will not negatively affect adjoining businesses.

Fire:

These comments are only related to this application and are primarily designed to let the applicant know in advance what some of the more important Fire Department requirements are.

Due to the building being a mixed-use occupancy/classification (F-1, B and S-1) fire sprinklers are required due to extraction of cannabis.

1. Please advise the applicant that any new construction must now meet the requirements of the California Fire Code, Section 903.2 as amended by the City of Seaside. All new construction is required to have automatic fire sprinklers installed. The automatic fire sprinkler system must conform to NFPA Standard 13. Separate fire sprinkler plans must be submitted and approved to the fire department before the building framing inspection is completed. The applicant is also required to contact Marina Coast Water Company to file an application for a fire service connection.
2. The building must also conform to the California Fire Code, section 903.4, 903.4.1, and 903.4.2 in regards to the automatic fire sprinkler system monitoring and alarms. The system shall have water-flow and water supply valve monitoring by a UL Central Station company and approved audible water flow alarms on the exterior of the building. In accordance with NFPA Standard 72, one pull station shall also be located at the main exit door from the building.
3. The applicant shall install a KNOX emergency access key box to the building. The key box is only for fire department operations after normal business operations have stopped, and prevents the need to damage doors or windows to gain entrance during an emergency.
4. A suitable number of 2A10BC fire extinguishers shall be placed throughout the building approximately 75 linear feet apart with the appropriate signage to make them visible.

5. The HAL Extraction booth shall have a separate fire extinguishing system installed aside from the building fire sprinklers.
7. The occupant shall inform the Fire Department the amount of hazardous materials that will be stored in the building.
7. Separate fire sprinkler plans (above and below) and fire alarm plans need to be delivered to Seaside Fire Department, located at 1635 Broadway Avenue. A minimum of (3) set of plans are required.

Standard:

1. Use Permit approval is subject to revocation procedures contained in Seaside Municipal Code section 17.69.060 in the event any of the conditions of this approval are violated, this discretionary permit was granted on the basis of false or misleading information, written or oral, given willingly or negligently by the applicant or property owner, and/or there has been a discontinuance of the use, or purposed for which the permit was issued, for a period of 180 days or more.
2. This Use Permit is subject to procedures and requirements of Chapter 17.54 (Permit Implementation, Time Limits, and Extensions), and those related to appeals and revocation in Article 6 (Zoning Ordinance Administration) of Title 17 of the Municipal.
3. The applicant agrees as a condition and in consideration of the approval of this discretionary permit that it will defend, indemnify and hold harmless the City of Seaside or its agents, officers and employees from any claim, action or proceeding against the City or its agents, officers or employees to attack, set aside, void or annul this approval. The applicant will reimburse the City for any court costs and attorney's fees, which the City may be required by a court to pay as a result of such action. City may, at its sole discretion, participate in the defense of such action; but such participation shall not relieve applicant of his obligations under this condition. The City shall promptly notify the applicant of any such claim, action, or proceeding, and the City shall cooperate fully in the defense thereof.
4. Any proposed future development shall comply with the requirements of the Fire, Health, Planning, Code Enforcement, Building and Public Works Departments.
5. The applicant shall comply with the security measures of the Seaside Police Chief outlined in Title 19 of the Seaside Municipal Code prior to receiving to a Certificate of Occupancy.
6. The project shall comply with the requirements and the applicable ordinances of the Monterey Peninsula Water Management District (MPWMD).
7. The project shall be responsible for all applicable local and/or regional development and/or impact fees including, but not limited to, sewer, water, and traffic fees, which shall be paid prior to building permit issuance.

8. The permit shall have no force or effect unless and until accepted, and the terms thereof agreed to, in writing, by the applicant and property owner within fifteen (15) days from the date of its approval.
9. This Use Permit shall expire and become void 12 months from the date of approval, or upon the expiration of another time limit established by the review authority, unless use has commenced within the required time limit or the Zoning Administrator has granted an extension of time. In accordance with Section 17.54.080.B.1.a of the Zoning Code, the applicant must file request for time extension at least 30 days prior to expiration date in order to receive consideration of time extension by the Commission.
10. For purposes of assuring compliance, the applicant, agents, representatives or their assignees agree not to deny or impede access to the subject property by City employees in the performance of their duties.

PASSED AND ADOPTED at a regular meeting of the Planning Commission of the City of Seaside, State of California, on the 13th day of May 2020, by the following vote:

AYES:

NOES:

ABSENT:

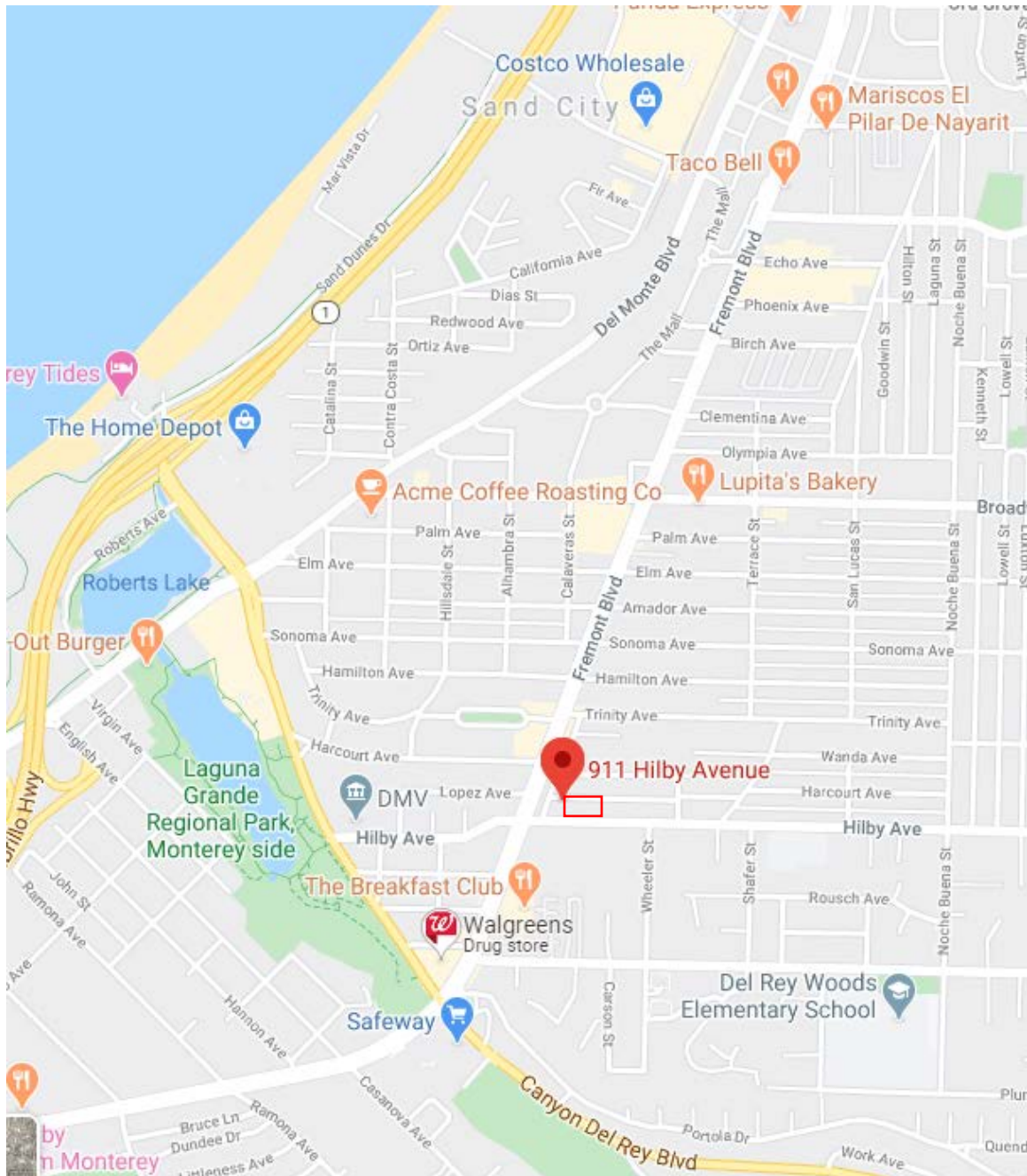
ABSTAIN:

John Owens, Chairperson

ATTEST:

Lesley Milton, City Clerk

Location Map: 911-915 Hilby Avenue





View from corner of Harcourt Ave and Virginia Street, showing the upper level windows of Suite 21.



View from Harcourt Avenue showing the upper level suite above the parking area and the multi-family use to the north.



View showing the commercial building, parking lot, and Harcourt Avenue right-of-way, as well as the multi-family use to the north.



Jim Rinehart, Agent
www.JimRinehart.com



Jim Rinehart
Agent

Administrator:

I am sending you this email to express my opposition to having a use permit approved to operate an indoor cannabis manufacturing business at 915 Hilby Ave., Ste 21, Seaside, CA 93955. I am asking you to deny the application based on the following reasons:

1. Hilby Professional Center is building that houses professionals. It is not an industrial or manufacturing facility or building. The current tenants of the building include: Legal Service for Seniors, Athena Medical Group, Edmundo Fimbres, O.D., Inc., Hilby Dental Lab, Passport Health, State Farm Agent, Jim Rinehart. The space that the



[Email Me!](#)



[831-393-8500](tel:831-393-8500)

FAX

[831-393-8503](tel:831-393-8503)



[Visit Jim's Home Page](#)



[Map & Directions](#)



[Access Your Account](#)

915 Hilby Avenue
Suite 28
Seaside, CA 93955

Languages: Spanish

NMLS # 868973
Agent License # 0C80523

applicant is attempting to get a use permit for was previously a dental office. The building is surrounded by a housing complex to the rear and side of the building and a 7/11 convenience store. This manufacturing business needs to be in an industrial park that is zoned for manufacturing.

2. The applicant is planning on operating a cannabis manufacturing facility using **“volatile solvents”**. **“Volatile solvents”** means any solvent that is or produces a flammable gas or vapor that, when present in the air in sufficient quantities, will create explosive or ignitable mixtures. The CA state’s examples of volatile solvents include, butane, hexane, propane, and ethanol. The presence of these volatile substances will create a hazard for customers, clients and people that work daily at the Hilby Professional Center. The smell and odor created by theses **volatile solvents** will make working in the building and visiting the building unbearable. Overexposure or **chronic exposure to volatile solvents** damages the central nervous system and causes chemical-driven liver and kidney damage. Other **solvents** contribute to atrophy of skeletal muscles, loss of coordination, vision problems, and

depression of the central nervous system.

3. The extraction of marijuana in the manufacturing process can be very dangerous with the threat of fire. The building does not have a sprinkler system.
4. The manufacturing process of marijuana poses many safety and security issues with the delivery, storage and disposal of the product and chemicals associated in the manufacturing process.

The Hilby Professional Center is a building where past tenants included CSUMB offices, real estate offices, law offices, chiropractors, property managers, bookkeeping and tax preparers, dental offices, and alterations services. These businesses all have one thing in common. They are professional in nature and the operation of the businesses do not cause harm to employees or customers visiting the establishments.

As a tenant at the Hilby Professional Center for the past 17 years I am against this USE permit being approved and request that you deny this Use permit request.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim", with a stylized, cursive script.

Jim Rinehart
Agent

Providing Insurance and Financial Services

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Your compliments to our team are appreciated!

Jim & Team



If this communication is securities related, click [here](#) for additional disclosures.

From: Christina Torie <Christina.Torie@wnco.com>
To: "cityclerk@ci.seaside.ca.us" <cityclerk@ci.seaside.ca.us>, "Brocha@ci.se...
CC: Christina Torie <Christina.Torie@wnco.com>
Date: 4/25/2020 3:48 PM
Subject: City of Seaside Zoning Administrator Public Hearing 04/27/2020, 5:30p.m. MUP -20-01; 911-915 suite 21, Hilby Ave., Seaside, Ca. 93955

City of Seaside Zoning Administrator

I am sending this e- mail to express my concerns regarding MUP-20-01 which is asking for permission to operate an indoor Cannabis Manufacturing/ retail business. I am sending this e- mail also to ask that the requested permit permission be denied. This location is already challenged as far as safety , the community of Seaside is already being provided these types of services and this is not the right fit as far as a business and residential location.

I am a 10 year resident and property OWNER. My property is located just across the alley road bordering the Hilby Professional building on the north side. The main entrance to my home (my garage) and my bedroom windows face this building as well. Every day, just looking out my bedroom windows, I have a constant reminder of just how challenged this residential area is already. I see the people who are experiencing homelessness. The owner of this building, Mr. William Kheiu, allows by his inaction, the congregating of the homeless who set up their camps under the building in the parking area, urinating and defecating in public areas, screaming and shouting at each other throughout the night, perhaps because of drug use, public intoxication or mental illness. I have and other members of my community have asked for assistance with this matter.

The police have been called numerous times to mitigate the situation, but without the support of this building owner, Mr. Kheiu himself asking for police assistance, stopping the drug use and late night shouting and screaming has been difficult.

On January 10, 2020 I personally tried to express my concerns to this property owner regarding this matter and was fairly quickly shown the office door. Roughly two weeks later early in the morning before office hours I had the experience of looking out my bedroom window at a police car in the parking lot. The police officer was administering CPR to a homeless woman laying on the ground in the Hilby building carport parking area.

Clearly this a challenged site already because of the lack of cooperation from the building owner with the adjacent residential community.

As mentioned earlier, the main entrance to my home is my garage which faces the northern borderline of the Hilby site. It is difficult to exit and enter my garage safely based on what is taking place in the parking lot of this site. This parking lot has an entrance from Hilby Avenue and an exit onto Virginia street, the street that borders the west side of the Hilby Professional Building and is also one street to the east of Fremont Blvd. It is a one way circuit with "ONE WAY, WRONG WAY and DO NOT ENTER" signs are posted. The north side of the parking lot is right up against the property line and the beginning of the service alley road which is a ONE WAY east to west alley road.

Currently this parking lot is being used like an intersection. The signs are not followed, there are no physical barriers to prevent car/ truck traffic going across the parking lot to the alleyway and it is sometimes difficult to safely exit or enter my home through the garage. The only improvement this building owner has made to address the parking lot situation is to repaint parking lot lines to indicate that the parking lot spaces are for his building.

I am concerned that a Cannabis manufacturing/ retail business at the Hilby Professional building would bring people and traffic into this residential community who are not familiar with the traffic flow. This could potentially make it even more unsafe for the (5) Townhome families (who's garages face this parking lot) to exit or enter their homes, add to the deterioration and use of the service alley road as well as

contributing to the parking lot confusion.

Further, challenges to this area in the past and currently include gang related activity such as tagging, damage to cars in the Hilby parking lot, drug dealing in the parking lot and by the 7-11 which is located across Virginia street, directly west of and bordering the Hilby Professional bldg. On numerous occasions the fences along the northern bordering service alley road have been tagged. Currently the street sign at the end of the service alley road and Virginia street are marked with a gang tag.

With the gang presence and activity in this residential community and around the Hilby Professional Bldg., I feel threatened by the possibility that this business may become a target for the local gang element and further gang activity roughly 30 feet from my home.

I understand these types of businesses try to maintain a low profile, however, over time the location of these types of businesses become a known fact. I have been told that maintaining a low business profile is a security measure and that those involved in the transportation and delivery of the Cannabis are not armed, but I am also aware that gang members who choose crimes such as robbery do carry guns. I am not interested in living near more potential gang related/ criminal activity.

Due to all of the above mentioned concerns, I am asking that this permit be denied. Seaside residents are currently being provided these types of services the potential business would provide. Seaside residents can access (6) six other store fronts for Cannabis retail and (2)two other sites for Cannabis manufacturing within ~2.5 miles from the Hilby Professional building.

This residential neighborhood has enough challenges already. It will not be positively served by yet another Cannabis manufacturing/ retail business in the Hilby Professional building, whose owner, has repeatedly not supported this residential community's safety.

I am a (10) ten year Seaside resident, a property OWNER, a long term contributor to the economy and stability of this Seaside community. I live here every day of the week, every week of the year. I do not have an option to go somewhere else to "go home". This residential neighborhood IS MY HOME. This building owner can go back to his home/ other office in Salinas. The potential business owner would get to go home to his house and leave this site.

I can't just move my home away from this site, but this potential Cannabis manufacturing/ retail business at this stage of the process can find another more suitable place to open for business.

I understand that the Seaside Zoning Department along with the Planning Division's ultimate goal is, "...to create a balanced and sustainable city that contributes to a high quality of life for our diverse community."

Please do not try to create a tax income steam for the sustainability of the city of Seaside at the expense and imbalance of the quality of life for those in this residential community which borders the Hilby Professional bldg.

Once again, please deny this permit.

Respectfully,
Christina Torie
Seaside resident and property owner

Seaside Zoning Administrator,

My name is Phillip Torie. I am a Seaside resident and homeowner of 17 years. My home is located mere feet from the proposed Cannabis manufacturing / retail facility.

This letter is being sent to officially OPPOSE this type of business at 911-915 Hilby Ave., suite 21, Seaside, Ca. 93955 (APN# 012-5362-051).

Here are some of my concerns:

1. Highly toxic and flammable materials used for the Cannabis extraction process are too close to the neighborhood's families.
2. Entering and exiting traffic is a concern at this location because of its proximity to other high density residential and commercial entities.
3. Other educational providers (i.e. Odemeyer Community Center, Pattullo Swim Center, Planned Parenthood and Seaside Family Health Center) are an important addition to this community. They are teaching children, teenagers, people with developmental challenges, adults and seniors which is just as vital and important as the K-6 school system.

For these reasons I am requesting that this permit application be denied/ disqualified.

Thank you,

Phillip A. Torie
17 year resident and homeowner in this Seaside residential community.

Sent from my iPad

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This e-mail message and all attachments transmitted with it may contain legally privileged and confidential information intended solely for the use of the addressee. If the reader of this message is not the intended recipient, you are hereby notified that any reading, dissemination, distribution, copying, or other use of this message or its attachments is strictly prohibited. If you have received this message in error, please notify the sender immediately and delete this message from your system. Thank you.

Beth Rocha - Re: Seaside Zoning Administrator Use Permit at 915 Hilby Ave., Ste 21 Seaside, Ca

From: Lesley Milton
To: Fimbres, Edmundo
Date: 4/27/2020 11:24 AM

www.Monterey2020Census.com

>>> Edmundo Fimbres <efimbres@gmail.com> 4/27/2020 11:21 AM >>>

Dear Sirs,

I am a tenant at 915 Hilby Ave., Suite 1. I want to express my opposition to the proposed permit that would allow the manufacture of marijuana products. This building should remain zoned for professional services only. Allowing the production of said product would endanger the health and well being of the other tenants do to the use of the solvents that will be used in the process.

Please do not allow this to happen.

--

Edmundo Fimbres,O.D.
Seaside, CA

Beth Rocha - Fwd: 915 Hilby Ave Cannabis Manufacturing Permit

>>> Hilby Lab <hilbylab@gmail.com> 4/27/2020 4:48 PM >>>

Dear Administrator,

I've recently become aware that a cannabis manufacturing business was seeking a permit to operate in the same building in which I own a business. I'm writing to you because of my concerns of the volatile and hazardous materials that might be used in the manufacturing process and the impact it might have on the safety and health of the other occupants in the building.

As a tenant of Hilby Professional Building, I'm afraid of the potentially dangerous environment the cannabis manufacturer would create for those of us who have to occupy the building day to day. I implore you to consider how it could negatively affect not only us but anyone who visits the building.

Sincerely,

Ann Parker
Hilby Dental Lab

Beth Rocha - Fwd: Minor use permit application #MUP-20-01

>>> Cesar Hernanadez <cesarhdez12@gmail.com> 5/2/2020 12:35 PM >>>

The minor use permit is on 911-915 Hilby ave.

That building is next to an area where Apartment buildings and houses are located and families with small children.

Smells from that building would easily make its way towards those homes. If they do allow them to be there, the people that live close by would not be able to say anything in the matter and would have to live with that u til they decide or are able to move out.

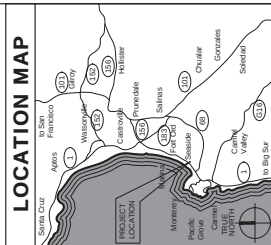
I do not want them there.

911 HILBY AVENUE, SUITE 21
SEASIDE, CA 93955

VICINITY MAP



VICINITY MAP



LOCATION MAP

REMODEL PORTION OF SECOND FLOOR.
NO EXTERIOR WORK TO OCCUR.

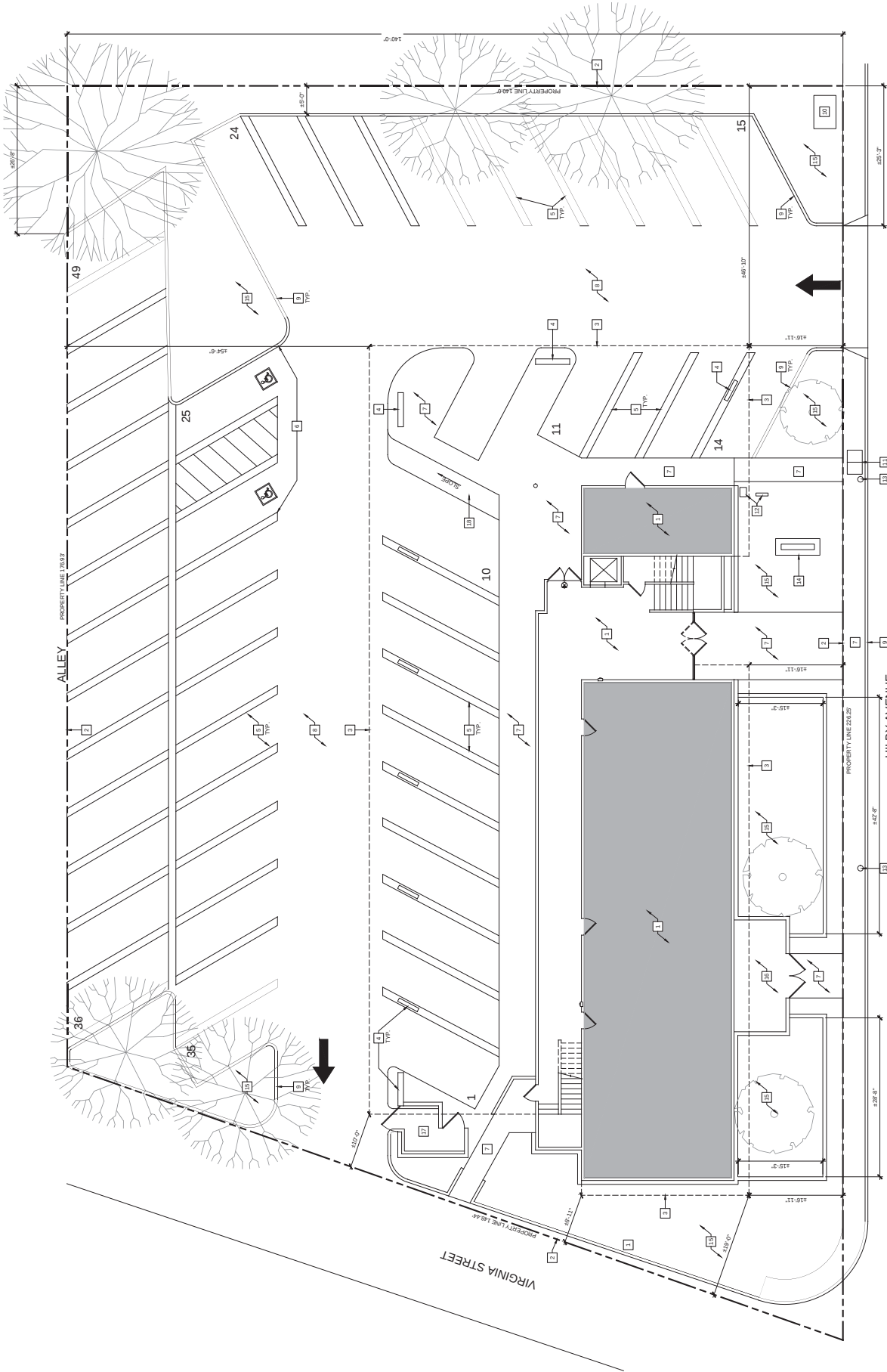
cur.

GENERAL NOTES

- [illegible]



LOT SIZE: 0.81 ACRES = 28,223 S.F.
 LOT COVERAGE: 5.033 S.F. = 17.8%
 LANDSCAPE AREA: 3,038 S.F. = 10.7%
 PARKING LOT AREA: 2,155 S.F. = 7.6%
 TOTAL: 5,231 S.F.



KEY NOTES

1. THE KEY NOTES THAT FOLLOW APPLY TO THE DRAWINGS ON THIS SHEET ONLY. REFER TO FOLLOWING SHEETS FOR NOTES THAT ARE APPLICABLE TO THOSE DRAWINGS.
2. EXISTING 2-STORY BUILDING.
3. PROPERTY LINE.
4. LINE OF UPPER FLOOR - SEE SHEET A201.
5. CONCRETE COLUMN SUPPORTING UPPER FLOOR.
6. EXISTING PAINTED PARKING STRIPING.
7. EXISTING ACCESSIBLE PARKING PAINTED STRIPING AND ACCESSIBILITY SYMBOL.
8. EXISTING ACCESSIBLE PARKING PAINTED STRIPING AND ACCESSIBILITY SYMBOL.
9. EXISTING CONCRETE CURB.
10. POLE UTILITY ON CONCRETE PAD.
11. UNDERGROUND UTILITY.
12. GAS METER AND METER.
13. CMI TRASH ENCLOSURE.
14. COURT YARD / ENTRY TO LOWER FLOOR TENANT SPACES.
15. PLANTER / LANDSCAPE AREA.
16. EXISTING MONUMENT SIGNAGE.
17. UTILITY POLE.
18. EXISTING CONCRETE ACCESSIBILITY RAMP.

KEY NOTES	
THE KEY NOTES THAT FOLLOW APPLY TO THE DRAWINGS ON THIS SHEET ONLY. REFER TO THE KEY NOTES ON THE PREVIOUS SHEETS FOR ADDITIONAL INFORMATION.	
1	SHARED AREAS AND COMMON USE CORRIDORS NOT IN SCOPE OF WORK.
2	NOT USED.
3	NOT USED.
4	EXISTING WINDOW TO REMAIN.
5	EXISTING STAIRCORE SYSTEM TO REMAIN.
6	EXISTING ELEVATOR.
7	EXISTING ELEVATOR.
8	EXISTING STAIRWAY.
9	LINE INDICATES FLOOR ABOVE.
10	PARKING GARAGE.
11	EXISTING FIRE EXTINGUISHER.
12	EXISTING INTERIOR PLANTER BOX.
13	EXISTING DIRT SIGN.
14	EXISTING BUILDING RESTROOMS.

KALI GOLD EXTRACTS, LLC
911 HILBY AVENUE
DAVID VARGAS
KALI GOLD EXTRACTS, LLC
911 HILBY AVENUE, SUITE 21
SEASIDE, CA 93955
A.P.N.: 012-362-051

[illegible]

OVERALL
FIRST / SECOND
FLOOR PLANS

SHEET NO.:

A201

FILE NAME: 20015-A201

KEY NOTES

THE KEY NOTES THAT FOLLOW APPLY TO THE DRAWING(S) ON THIS SHEET ONLY. REFER TO FOLLOWING SHEETS FOR NOTES THAT ARE APPLICABLE TO THOSE DRAWINGS.

1 SHADED AREAS AND COMMON USE CORRIDORS NOT IN SCOPE OF WORK.

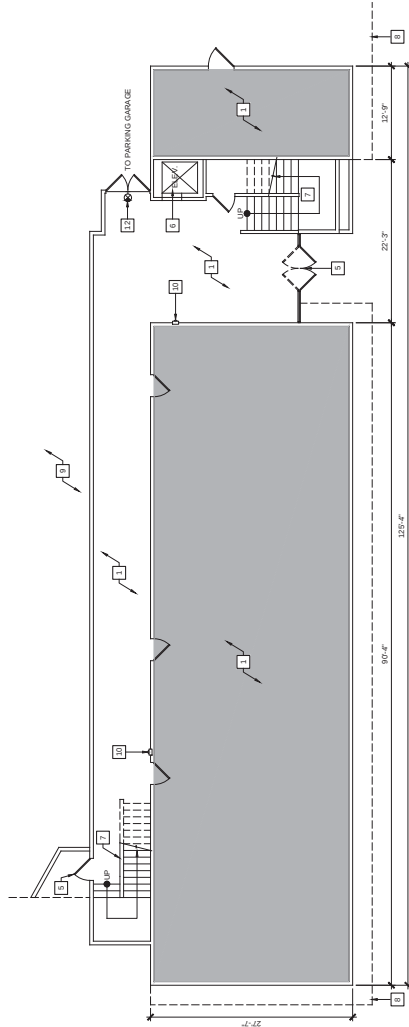
- | | |
|----|---------------------------------------|
| 1 | SHADY AREAS AND COMMON USE CORRIDORS |
| 2 | NOT USED. |
| 3 | NOT USED. |
| 4 | EXISTING WINDOW TO REMAIN |
| 5 | EXISTING STOREFRONT SYSTEM TO REMAIN. |
| 6 | EXISTING ELEVATOR. |
| 7 | EXISTING STAIRWAY. |
| 8 | LINE INDICATES FLOOR ABOVE. |
| 9 | PARKING GARAGE. |
| 10 | EXISTING FIRE EXTINGUISHER |
| 11 | EXISTING INTERIOR PLANTER BOX. |
| 12 | EXISTING EAST SIDE. |
| 13 | EXISTING BUILDING RESTROOMS. |

GENERAL NOTES

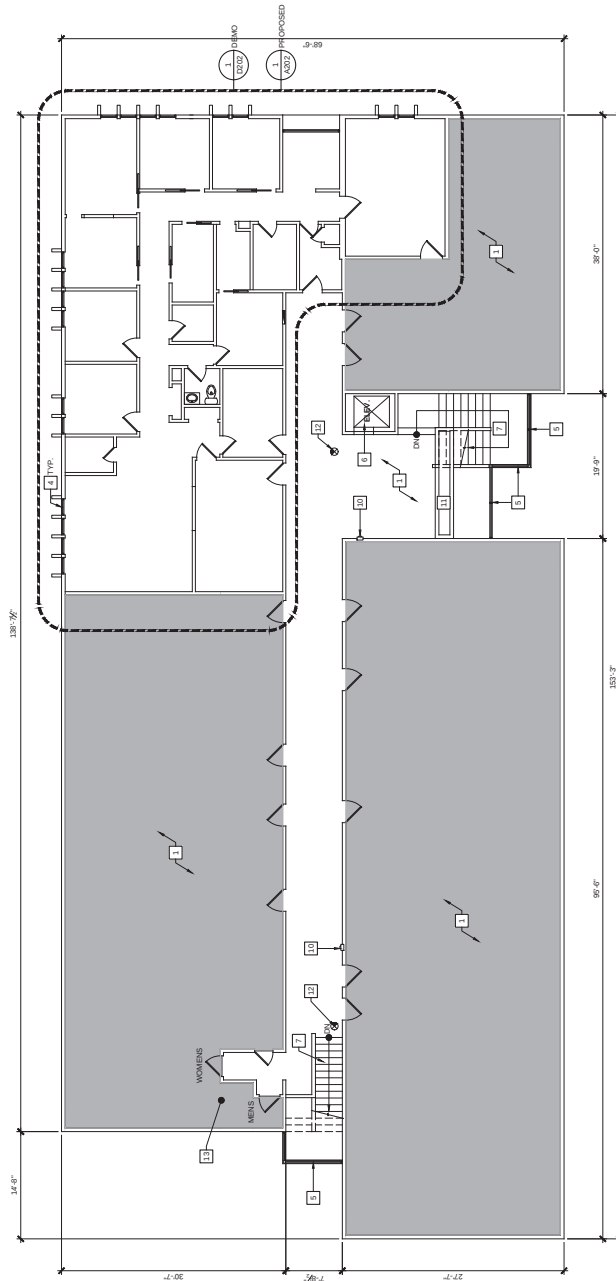
1. FIRST FLOOR SHOWN FOR REFERENCE ONLY - NO WORK TO OCCUR U.O.N.

LEGEND

-  (E) WALL TO REMAIN.
 (E) DOOR TO REMAIN.
 (E) WINDOW TO REMAIN.



1 REFERENCE FIRST FLOOR PLAN



2 OVERALL SECOND FLOOR PLAN
SCALE: 1/8"=1'-0"

DEMOLITION NOTES

THE DEMOLITION NOTES THAT FOLLOW APPLY TO THE DRAWINGS ON THIS SHEET ONLY. REFER TO FOLLOWING SHEETS FOR NOTES THAT ARE APPLICABLE TO THOSE DRAWINGS.

- (1) REMOVE WALL, OR PORTION OF WALL, TO ACCOMMODATE NEW WORK.
- (2) REMOVE DOOR.
- (3) REMOVE FLOOR COVERING THROUGHOUT 1. SPACE.
- (4) REMOVE EXISTING SINK, TOILET AND ASSOCIATED PLUMBING LINES NO LONGER IN USE.

DEMOLITION GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF SEASIDE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF SEASIDE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF SEASIDE.
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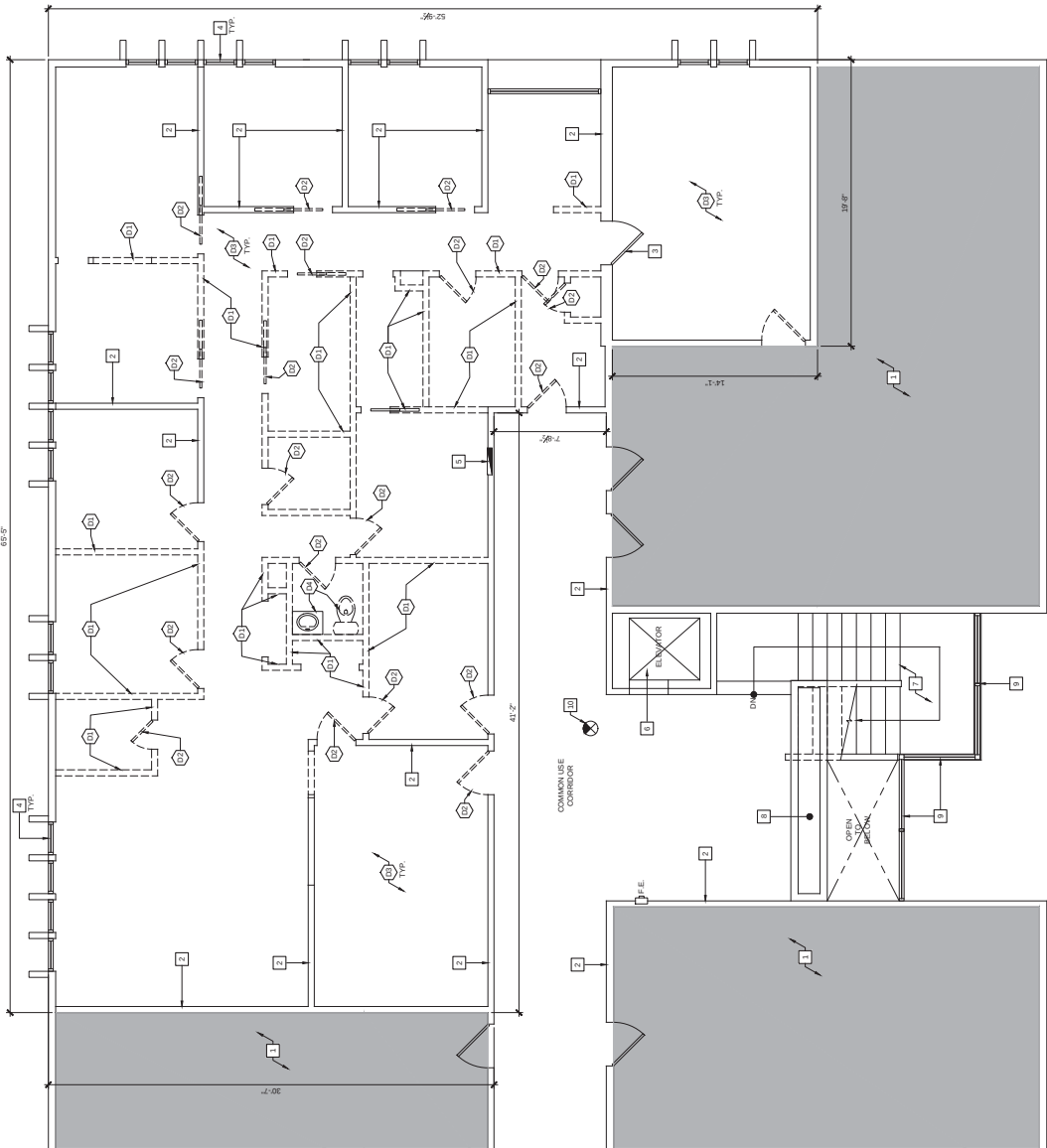
KEY NOTES

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- (1) SHADDED AREAS AND COMMON USE CORRIDOR NOT IN SCOPE OF WORK.
- (2) EXISTING WALL, OR PORTION OF WALL, TO REMAIN.
- (3) EXISTING DOOR TO REMAIN.
- (4) EXISTING WINDOW TO REMAIN.
- (5) EXISTING ELECTRICAL PANEL.
- (6) EXISTING ELEVATOR.
- (7) EXISTING STAIRWAY.
- (8) EXISTING INTERIOR PLANTER BOX.
- (9) EXISTING STOREFRONT WINDOW SYSTEM.
- (10) EXISTING EXIT SIGN.

LEGEND

- (1) WALL TO REMAIN.
- (2) DOOR TO REMAIN.
- (3) WINDOW TO REMAIN.
- (4) WALL TO BE REMOVED.
- (5) DOOR AND FRAME TO BE REMOVED.
- (6) WINDOW TO BE REMOVED.



EXISTING CONDITIONS/DEMOLITION -
PARTIAL UPPER FLOOR PLAN
SCALE: 1/4" = 1'-0"

1

KEY NOTES

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5. EXISTING STAIRFRONT SYSTEM TO REMAIN.
6. EXISTING ELEVATOR.
7. EXISTING STAIRWAY.
8. DASHED LINE INDICATES EXISTING WALL BELOW.
9. EXISTING FIRE EXTINGUISHER.
10. PROPOSED SEMI RECESSED WALL MOUNTED FIRE EXTINGUISHER TYPE 2A-10BC TO MEET NFPA 10 MIN. STANDARD.
11. EXISTING INTERIOR PLASTER EX.
12. EXISTING EXIT SIGN.
13. PROPOSED INTERNALLY ILLUMINATED EXIT SIGN. FINAL LOCATIONS TO BE DETERMINED BY FIRE MARSHAL.
14. ELECTRICAL PANEL AND/OR SUB PANEL - SEE ELECTRICAL DRAWINGS.
15. INTERIOR WINDOW. REFER TO WINDOW SCHEDULE FOR TYPE AND DIMENSIONS.
16. DOOR MOUNTED RESTRICOR UNLESS ACCESSIBILITY SIGNAGE.
17. EMPLOYEE LOCKERS. OWNER FURNISHED. CONTRACTOR INSTALLED. REFER TO ARCHITECTURAL SPECIFICATIONS FOR DETAILS AND FINISHES.
18. TYPICAL ACCESSIBLE REQUIRED UNIFORMS AT WORKING DOORS. REFER TO DETAIL FOR SPECIFIC REQUIREMENTS.
19. UL LISTED CANNISIS EXTRACTION PREMANUFACTURED UNIT.
20. OVEN UNIT OWNER FURNISHED. CONTRACTOR INSTALLED.
21. PROPOSED ACCESSIBLE HAND WASH SINK & WORK CENTER.
22. PROPOSED SECURITY CAMERA LOCATIONS - TYPICAL.
23. PROPOSED CCTV SECURITY COMPUTER, RECORDER AND MONITOR.

GENERAL NOTES

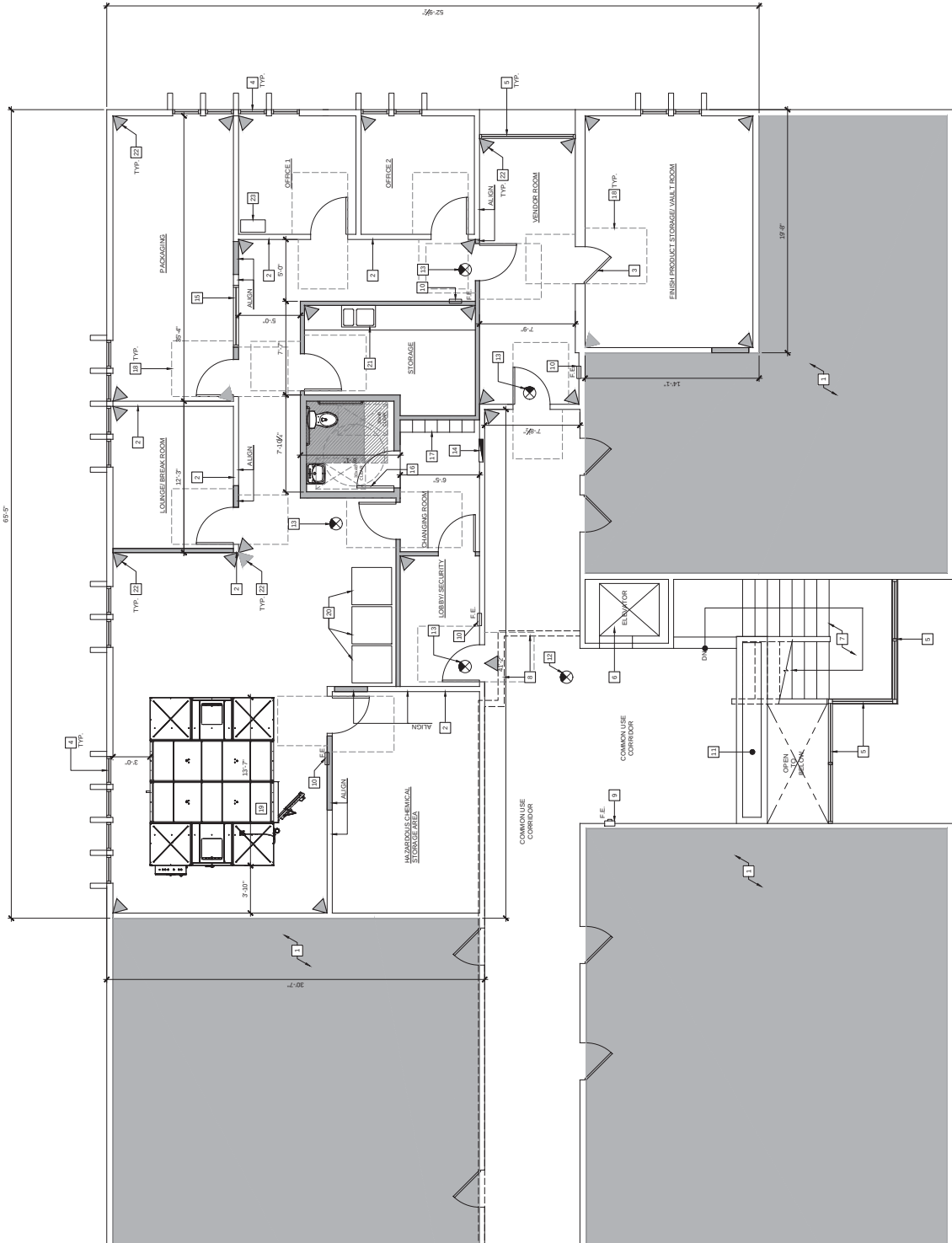
1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR OMISSIONS IN THE EXISTING CONDITIONS PRIOR TO THE BEGINNING OF THE WORK. IF ANY QUESTIONS ARISE AS TO THE REMOVAL OF ANY MATERIAL, CLARIFY THE POINT IN QUESTION WITH THE ARCHITECT BEFORE PROCEEDING.
2. CONTRACTOR SHALL PROTECT ALL EXISTING ITEMS THAT ARE NOT SCHEDULED FOR REMOVAL. IF ANY DAMAGE TO EXISTING ITEMS OCCURS DURING THE WORK, THE CONTRACTOR SHALL REPAIR OR REPLACE THE SAME TO ORIGINAL CONDITION OR BETTER.
3. CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS/EQUIPMENT AS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL OF ALL ITEMS AS INDICATED.
4. CONTRACTOR TO CLEAN AND PROPERLY DISPOSE OF ALL ABANDONED EQUIPMENT AND MATERIALS. CONTRACTOR SHALL FURNISH ALL MATERIALS AND EQUIPMENT FOR ALL ITEMS FOR DISPOSAL WITH TENANT AND/OR OWNER PRIOR TO STARTING WORK.
5. CONTRACTOR SHALL IMPLEMENT CONSTRUCTION DUST / DEBRIS CONTROL MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION.
6. AT COMPLETION OF DEMOLITION WORK, THE CONSTRUCTION AREAS SHALL BE LEFT IN A CLEAN, SAFE AND SOUND CONDITION. ALL DEBRIS AND MISCELLANEOUS MATERIAL SHALL BE REMOVED.
7. DEMOLITION IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON DRAWINGS. THE INTENT IS TO INDICATE THE GENERAL SCOPE OF DEMOLITION REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
8. REMOVAL OF EXISTING MATERIALS AND EQUIPMENT SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
9. GENERAL CONSTRUCTION CONTRACTOR SHALL PROVIDE APPROPRIATE WEATHER PROTECTION OF EXISTING STRUCTURE WHEN DEMOLITION WORK CAUSES EXPOSURE OF EXISTING CONSTRUCTION TO THE ELEMENTS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, ACCESS FOR TENANT, CUSTOMER USE, MECHANICAL VENTILATION, HEATING AND COOLING SYSTEMS PROVIDED TO ALL TENANTS IN THE EXISTING BUILDINGS WHERE WORK WILL OCCUPY AS WELL AS IN BUILDINGS WHERE WORK WILL OCCUR.

LEGEND

- (E) WALL TO REMAIN.
- (E) DOOR TO REMAIN.
- (E) WINDOW TO REMAIN.
- (E) WALL OR WALL PORTION OF WALL.
- (E) DOOR.

PARTITION SCHEDULE

SYMBOL TYPE	DESCRIPTION
(E)	TYPE A - 24" WOOD STUD WALL PER STRUCTURAL DRAWINGS



1 PROPOSED
PARTIAL UPPER FLOOR PLAN
SCALE: 1/4"=1'-0"

PROJECT DESCRIPTION

Existing Use

The applicant is applying for a minor use permit for a commercial cannabis volatile manufacturing facility in an existing building. The site of the proposed cannabis manufacturing (extraction) site is in the Hilby Professional Center. The subject site is designated as "CC" (community commercial) in the City of Seaside's General Plan. The building is a two-story wood building that houses multiple tenants and has a total of 13,886 square feet. The Hilby Professional Center is a building class B structure. There is ample parking on the property's lot with security patrol and elevator. It is located on the major thoroughway of Fremont Boulevard. The building is currently zoned for community commercial and is not located within the buffer of any schools or parks. On the western side of the site property there is a 7- Eleven convenience store. The southern side of the site property is bordered with Hilby Avenue. A single-family residence is located on the eastern border of the site property. Located on the northern border of the site property runs Harcourt Avenue. Our operation will utilize a single suite located inside the Hilby Professional center consisting of 2,413 square feet. The suite comes with five reserved parking spaces. There are additional parking spaces in the building lot as well as street parking spaces located on Hilby Avenue that can be utilized by the tenants.

Surrounding Land Uses

The subject site is designated as "CC" (community commercial) in the City of Seaside's General Plan. The properties to the north and east of the site property are zoned as "RM" (medium density residential). This area consists of single-family residences and multi-family residences. The properties on the western and southern border of the site property are zoned as "CC" (community commercial). Across Hilby avenue on the southern side of the property is a non-profit organization. Across Hilby avenue to the southwest of the property is a fast-food restaurant. Properties northerly of the site consist of single and multi-family residential properties and community commercial properties including an art studio, money transfer service, and convenience store. The proposed project complies with current zoning designation of the property and is compatible with the other commercial uses on the site and the surrounding area. The proposed cannabis manufacturing business would substitute for a previously existing dentist office. The project site is not located within the buffer zone of any sensitive uses as defined by the Municipal Code. Please refer to the Proposed Location Section, the Cannabis Zoning Verification Letter and related map in the Cannabis Business Permit Application for the schools and parks and parks buffers, and to the location map for an overview of the surrounding uses.

Proposed Use

The proposed project consists of the development of a new cannabis extraction service business. The business will be located in Suite 21 of the Hilby Professional Center located at 911 Hilby Ave, Seaside, California 93955. The outside area of the property will only be utilized for parking. All business activities will take place in Suite 21 of the Hilby Professional Center located at 911 Hilby Ave, Seaside, California.

The applicant intends to apply for a Type 7 – Volatile Manufacturing license from the State of California Department of Public Health (CDPH). Solvents to be used in the closed-loop extraction process include hexane and butane. Products to be manufactured are concentrates.

Extraction will take place in a pre-fabricated C1-D1 unit to be permitted and approved by the City of Seaside.

The operation proposes to employ 3 to 8 employees. Hours of operation are proposed to be 6:00 AM to 6:00 PM Monday through Friday.

Utilities

All utilities are available to the site.

Environment

Cannabis products may have some odor that is detectable within the facility. Air scrubbers and filtration systems will be constructed and installed within the existing ventilation system to eliminate cannabis odor from escaping and to ensure that odors are undetectable outside of the facility.

The installation of the pre-fabricated C1-D1 unit will require the installation of rooftop exhaust fans. The odor control system will revolve around the rooftop-mounted exhaust fans. In the system, as air is drawn into the filters, odors are trapped by the activated charcoal and discharged to the exterior.

Hazardous Materials

The extraction process will include the use of butane and propane. It is anticipated that there will be approximately 200 pounds of the solution of butane and propane kept on the site for the operation.

Schedule

The Applicant anticipates applying for construction permits upon issuance of the minor use permit, anticipated in March 2020. Following construction, it is anticipated that the pre-fabricated C1-D1 unit and extraction equipment will be installed and certified. The Applicant will apply for a state provisional license to be issued upon City authorization.

Security Plan

Applicant will maintain facility security as required by State of California regulations and local regulations.

Security Measures

Applicant shall provide adequate security on the premises, including lighting and alarms, to ensure the safety of persons and to protect the premises from theft and other crimes. Applicant shall implement and maintain sufficient security measures to both deter and prevent unauthorized entrance into areas containing cannabis or cannabis products.

Security measures shall include, but are not limited to, the following:

1. Prevent individuals from loitering on the premises of the facility if they are not engaging in activity expressly related to the operations of the facility;
2. Establish limited access areas accessible only to authorized facility personnel;
3. Store all cannabis and cannabis products in a secured and locked safe room, safe, or vault, and in a manner as to prevent diversion, theft, and loss, except for limited amounts of cannabis and cannabis products used for display purposes, samples or immediate sale;
4. Install security cameras on site.

Limited Access Areas

“Limited-access” areas, accessible only by employees and contractors of Applicant, will be securely locked using commercial-grade, nonresidential door locks. Applicant shall also use commercial-grade, nonresidential door locks on all points of entry and exit to the licensed premises.

Only employees of the licensee and other authorized individuals (outside vendors, contractors, or other individuals conducting business that requires access to the limited-access areas) access the limited-access areas of the licensed premises.

An individual who enters the limited-access area and is not employed by the licensee shall be escorted by an employee of the licensee at all times while within the limited-access area.

A list or record will be maintained of all authorized individuals who are not employees who enter the limited-access areas, including the name of the individual, the company the individual works for, the reason the individual entered the limited-access area, the date, and the times the individual entered and exited the limited-access area. These records shall be made available to the Bureau immediately upon request.

No employee or owner of the licensee shall receive consideration or compensation for permitting an individual to enter the limited-access areas.

Entrances to all limited-access areas shall have a solid door and a lock meeting the requirements of the State of California regulations and local regulations. The door shall remain closed when not in use during regular business hours.

Badge

All agents, officers, or other persons acting for or employed by the Company shall be required to wear a laminated or plastic-coated identification badge at all times while engaging in commercial cannabis activity. The identification badge shall, at a minimum, include the Company's "doing business as" name and license number, the employee's first name, an employee number exclusively assigned to that employee for identification purposes, and a color photograph of the employee that clearly shows the full front of the employee's face and that is at least 1 inch in width and 1.5 inches in height. The Company shall prepare and issue the badge at the time of employment. Each employee will be assigned a unique identification number. The badge will indicate the type of access that the employee has and will be updated upon change of position and surrendered upon termination of employment.

Secure Storage

All cannabis and cannabis products shall be stored in a secured and locked safe room, safe or vault, and in a manner to prevent diversion, theft, and loss, except for limited amounts of cannabis used for display purposes, samples or immediate sale.

Security Camera Monitoring

The premises will be monitored with a high-definition (HD) digital video surveillance system with a minimum camera resolution of 1280 × 720 pixels or as required. The video surveillance system shall at all times be able to effectively and clearly record images of the area under surveillance.

Camera Placement

Applicant will install and maintain video monitoring equipment in proper working order. Each camera shall be placed in a location that allows the camera to clearly record activity occurring within 20 feet of all points of entry and exit on the licensed premises, and allows for the clear and certain identification of any person and activities in all areas required to be filmed.

Each camera shall be permanently mounted and in a fixed location. Security camera recording will be continuous, 24 hours per day, 7 days per week, to monitor interior and exterior areas of the facility as follows:

1. Areas where cannabis goods are weighed, packed, stored, loaded, and unloaded for transportation, prepared, or moved within the premises;
2. Limited-access areas;
3. Security rooms;
4. Areas storing a surveillance-system storage device with at least one camera recording the access points to the secured surveillance recording area; and
5. Entrances and exits to the premises, which shall be recorded from both indoor and outdoor vantage points.

Maintenance of Video Surveillance Equipment

The security surveillance camera's footage will be remotely accessible. In addition, remote and real-time, live access to the video footage from the cameras shall be provided to local and State licensing authorities. Surveillance video recordings shall be maintained for a minimum of 30 days (or more per State regulations) and shall be made available to State and local authorities.

The physical media or storage device on which surveillance recordings are stored shall be secured to protect the recording from tampering or theft. The location of the surveillance recordings storage is indicated on the premises diagram. Surveillance recordings shall be kept for a minimum of 90 calendar days. Copies of the recordings shall be sent or otherwise provided to the Bureau upon request within the time specified by the Bureau.

Recorded images shall clearly and accurately display the time and date.

The video surveillance system shall be equipped with a failure notification system that provides notification to the licensee of any interruption or failure of the video surveillance system or video surveillance-system storage device.

If multiple licensed premises are contained within the same building, a single video surveillance system covering the entire building may be used by all of the licensees under the following conditions: (2) Each applicant or licensee shall include in their security operating procedures, submitted with the application pursuant to State of California regulations and local regulations, an explanation of how the video surveillance system will be shared, including who is responsible for monitoring the video footage and storing any video recordings. (3) All licensees shall have immediate access to the surveillance recordings to produce them pursuant to

subsection (i) of this section. (4) All licensees shall be held responsible and subject to discipline for any violations of the video surveillance requirements.

Alarm System

Applicant will have a professionally installed, maintained, and monitored alarm system. Sensors will be installed to detect entry and exit from all secure areas, and panic buttons installed in appropriate locations.

Background Check

Every person listed as an owner, manager, supervisor, employee or volunteer, of Applicant must submit fingerprints and other information deemed necessary for a background check.

Contact

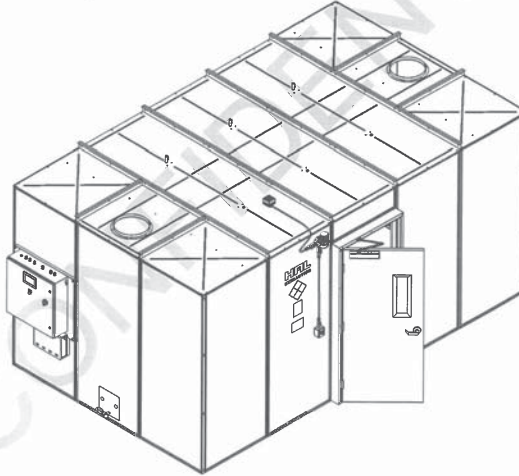
Applicant shall provide the local authorities and the licensing authority with the name, telephone number, facsimile number, and e-mail address of a community relations contact to whom the public can provide notice of problems associated with the commercial medical cannabis operation. Applicant shall make a good faith effort to resolve problems without the need for intervention.

Notification

Applicant shall notify the local law enforcement and the licensing authority within twenty-four (24) hours after discovering any of the following:

1. Significant discrepancies identified during inventory;
2. Diversion, theft, loss, or any criminal activity involving the facility or any agent or employee of the facility;
3. Any other breach of security.

Extraction Booth Systems 85U, 120U, 150U, 180U, 215U 170P, 265P, and 355P Specification Information



720.504.4726

5902 McIntyre St. Golden, CO 80403

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2. Objective

The following HAL Extraction Booth pre-installation specification information is intended to be used as a guide. This guide can be used as a reference when planning the install of your HAL

Extraction Booth. While the guide references the Classic Series 150U, the guide is still applicable for all the following HAL Extraction Booths.

2.1 Classic Series

- 85U
- 120U
- 180U
- 215U

2.2. Production Series

- 170P
- 265P
- 335P

3. Code Compliance

The HAL Extraction booth models 85U, 120U, 150U, 180U, 215U, 170P, 265P, and 335P have been evaluated to meet applicable requirements of the following nationally recognized testing laboratory standards.

- California Fire Code (CFC) Chapter 38
- National Fire Protection Agency (NFPA) 1, Chapter 38
- NFPA 30
- NFPA 33
- NFPA 58
- NFPA 70 / National Electric Code (NEC)
- NFPA 91
- International Mechanical Code (IMC) 510
- Underwriters Laboratories (UL) 508A
- UL 864
- UL 1389
- UL 2017



- UL 2075

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In addition to these instructions, the installation and operation of this booth shall comply with all applicable building, fire, zoning, and construction codes required by your local jurisdiction, which may include:

- ANSI/NFPA 70, (NEC)
- International Fire Code (IFC) Chapter 39
- ANSI/NFPA 1, "Fire Code" Chapter 38
- California Seismic Structural Analysis

All engineering peer reviews have been performed by Pressure Safety Inspectors, LLC (PSI). With state appointed codes and standards in the following state certifications.

Arizona	New Mexico
California	New York
Colorado	North Carolina
Florida	North Dakota
Hawaii	Ohio
Idaho	Oklahoma
Kansas	Oregon
Kentucky	Pennsylvania
Maine	South Carolina
Maryland	Tennessee
Massachusetts	Texas
Michigan	Vermont
Minnesota	Washington
Nevada	

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4. MAQs

APPLICABLE BUILDING AND FIRE CODES MUST BE FOLLOWED FOR MAXIMUM ALLOWABLE QUANTITIES (MAQ) OF SOLVENT USED WITHIN THE HAL EXTRACTION BOOTH SYSTEM.

4.1. NFPA 58

Table 1: Liquefied petroleum gas (LP-Gas) code maximum allowable storage quantities of LP-Gas in industrial storage occupancies (excerpts), table 8.3.1(b).

OCCUPANCY	INDUSTRIAL
MAXIMUM ALLOWABLE QUANTITY (MAQ) STORAGE	300 POUNDS
MAQ WITH 300 FEET SEPARATION	ADDITIONAL 300 POUNDS

4.2. NFPA 30

Table 2: Maximum allowable quantity of flammable and combustible liquids per control area (excerpts), table 9.6.1.

CLASS / DESCRIPTION	SOLVENT	QUANTITY (GAL)	NOTE
1A - FLAMMABLE LIQUID	PENTANE	30	1/2
1B - FLAMMABLE LIQUID	ETHANOL / ISOPROPYL ALCOHOL	120	1/2

4.3. 2016 CALIFORNIA FIRE CODE

Table 3: Maximum allowable quantity of hazardous materials per control area (excerpts), table 5003.1.1(1)

CLASS / DESCRIPTION	SOLVENT	STORAGE (GAL)	USE - CLOSED SYSTEMS (GAL)	USE - OPEN SYSTEMS (GAL)
1 - FLAMMABLE GAS / GASEOUS LIQUIDIFIED	BUTANE / PROPANE	150 ³⁴	150 ³⁴	N / A
1A - FLAMMABLE LIQUID	PENTANE	30 ³⁴	30 ³	10 ³

³⁴Quantities are permitted to be increased 100 percent where stored in approved flammable liquids storage cabinets or in safety cans in accordance with the fire code. Where Note 2 also applies, the increase for both notes is permitted to be applied cumulatively.

³Quantities are permitted to be increased 100 percent in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13, Standard for Installation of Sprinkler Systems. Where Note 1 also applies, the increase for both notes are permitted to be applied cumulatively.

³Maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied cumulatively.

Maximum allowable quantities shall be increased 100 percent when stored in approved storage cabinets, day boxes, gas cabinets, exhausted enclosures, or listed safety cans. Listed safety cans shall be in accordance with Section 5003.9.10, where noted also applies, the increase for both notes shall be applied cumulatively.

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1B - FLAMMABLE LIQUID	ETHANOL / ISOPROPYL ALCOHOL	120 ³⁴	120 ³	30 ³
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5. Control Areas

5.1.Examples Within MAQs

5.1.1. 1-Control Areas, 1-Extraction Booth, 1-Solvent Type, (Figure 1) *

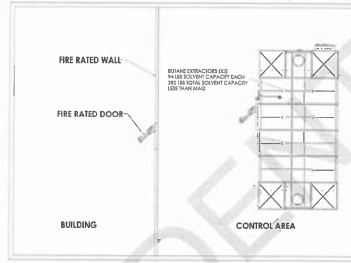
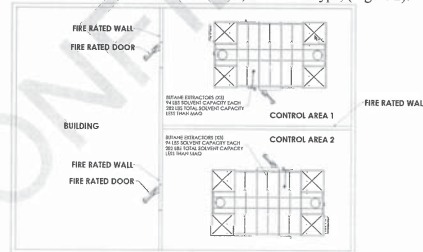


Figure 1: HAL Model 150U Control Areas.

5.1.2. 2-Control Areas, 2-Extraction Booths, 2-Solvent Type, (Figure 2).



*All fire rated walls are assumed to be constructed up to ceiling. A 1-hour fire rated ceiling assembly is required for room with a drop ceiling.
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Figure 2: HAL Model 150U Control Areas.

5.1.3. 2-Control Areas, 2-Extraction Booths, 2-Extraction Hoods, 2-Solvent Types, (Figure 3).

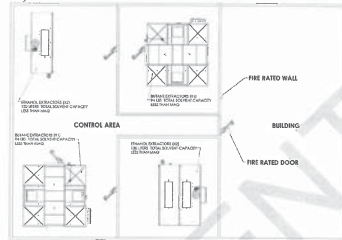


Figure 3: HAL Model 85U, 55H, and 25H Control Areas.

5.2.Example Exceeding MAQs

5.2.1. 2-Control Areas, 2-Extraction Booths, 1-Solvent Type, (Figure 4).

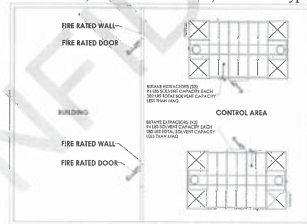


Figure 4: HAL Model 150U Control Areas.

6. Booth Placement

6.1.Control Panel & Electrical

6.1.1. The control panel is not rated for hazardous locations.

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- 6.1.2. The control panel must be outside of the any Class I Division 1 or Division 2 zone, (Figure 5).

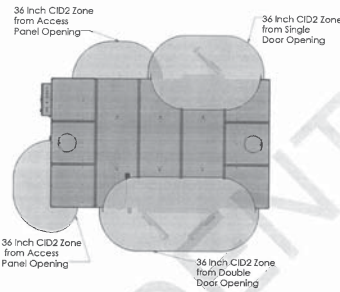


Figure 5: HAL Model 150U Class I Division 2 zones. Shown with non-standard, optional double doors.

- 6.1.3. The control panel door must be able to fully swing open for maintenance and repair.
6.1.4. The control panel door must have a minimum of a 36 inches clearance⁵ which is required from the front panel surface to the nearest wall, (Figure 6).



⁵ NFPA 70 110.26
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Figure 6: HAL Model 150U control panel clearances.

- 6.1.5. The control panel can be remotely mounted.
6.2. Access Panels, (Error! Reference source not found.)
6.2.1. The access panel may be installed at any 40" x 98" panel location on all sides of the booth.

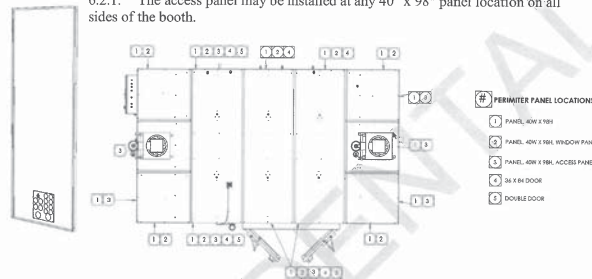


Figure 7: HAL Model 150U panel placement options. Shown with optional double doors.

- 6.2.2. The access panel should be installed with the placement of the extraction systems and auxiliary equipment in mind.
6.2.3. A 36" Class I, Division 2 radius exists around all directions of the access panel.
6.2.4. All components within this radius must be rated for Class I Division 2 or greater hazardous locations.
6.2.5. Penetrations into the booth do not need to be routed through the utility penetration panel.
6.2.6. Any penetration made to the booth needs to be properly sealed, with the supplied fire rated caulking.

7. Booth Construction

7.1. Anchoring

- 7.1.1. The extraction booth must be mounted on a smooth, level, non-combustible flooring material, ideally 2500 PSI concrete or greater.
7.1.2. All hardware and drop-in anchors required for installation are provided.
7.1.3. All drop-in anchors are Simpson Strong-Tie, DIAB25 / DIABL25.

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DIAB Allowable Tension and Shear Loads in Normal-Weight Concrete

Model No.	Base Rate (ksi)	Embed. Depth (in.)	Concrete Strength (ksi)	Concrete Strength (MPa)	Crack Width (in.)	Crack Width (mm)	Horizontal Load (lb)	Horizontal Load (kN)	Vertical Load (lb)	Vertical Load (kN)	Shear Load (lb)	Shear Load (kN)	Horizontal Load (lb)	Horizontal Load (kN)	Vertical Load (lb)	Vertical Load (kN)
DIAB25	1/4	1	3	4	1,565	390	1,849	400	1,845	400	1,840	400	1,840	400	1,840	400
DIAB25	1/4	1	3	4	1,565	390	1,849	400	1,845	400	1,840	400	1,840	400	1,840	400

- The allowable loads listed are based on a safety factor of 4.0.
- Refer to allowable load-adjustment factors for edge distance and spacing on page 228.
- Allowable loads may be linearly interpolated between concrete strength listed.
- The minimum concrete thickness is 1½ times the embedment depth.
- Allowable loads may not be increased for short-term loading due to wind or seismic forces.

7.2. Standard Mounting

- Each panel has (3) three clearance holes for mounting each panel to the floor using drop-in anchors, (Figure 8).
- A 3/8-inch masonry drill bit is used to drill holes in the concrete after the shell has been constructed.

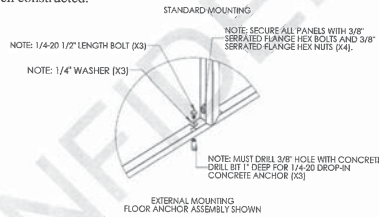


Figure 8: HAL Extraction Booth external / standard mounting option.

7.3. Internal / Corner Mounting

- Provide at least 36 inches of setback for all adjacent non fire rated walls.
- If the booth is placed within 36 inches of a wall, ceiling, or partition, it must carry a fire rating of no less than 1-hr.
- When mounting the extraction booth in a corner use the provided internal extraction booth "L" mounting brackets in lieu of accessibility to external panel mounting.
- At least (2) two internal mounting brackets are required per panel when mounting in a corner. A minimum of (4) four drop-in anchors must be installed on panel, (Figure 9) & (Figure 10).

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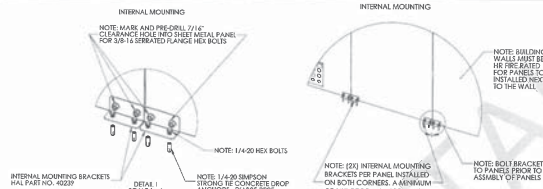


Figure 9: HAL Extraction Booth internal / corner mounting options.

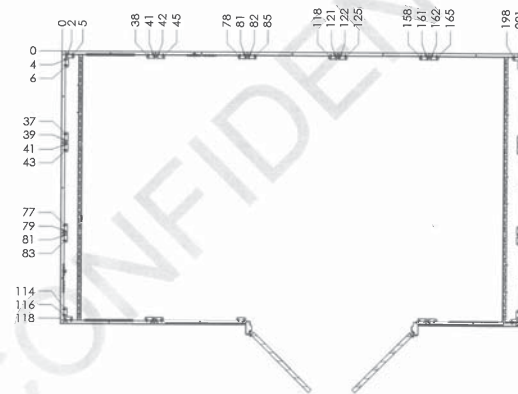


Figure 10: HAL Model 150U internal mounting bracket locations. Shown with optional double doors.

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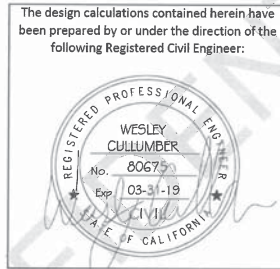
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7.4. Seismic Information

- 7.4.1. Some jurisdictions require seismic reports.
- 7.4.2. Booths have been certified and stamped in accordance with the following building codes.
 - 7.4.2.1. ASCE 7-10.
 - 7.4.2.2. ACI 318-14
 - 7.4.2.3. CBC 2016
 - 7.4.2.4. AISC 341-10



- 7.4.3. When using **ALL OF THE REQUIRED MOUNTING HOLES** for the panel, or **ALL OF THE REQUIRED INTERNAL MOUNTING BRACKETS** in a corner, the extraction booth's tensile and shear loads are below the maximum allowable loads in the event of seismic activity.⁶

Concrete Drop-In Anchor Loading Results		
	Tension (lbs / bolt)	Shear (lbs / bolt)
Maximum (Actual)	129	175
Maximum (Allowable)	347	460

⁶ Contact HAL Extraction Technical Support for further details.
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8. ADA Compliance & Door

8.1. Door

- 8.1.1. The door may be installed in place of any 40" x 98" panel location on the length side of the booth, except for corner panels.
 - 8.1.1.1. The door must be installed with at least one 40" x 98" panel on each side so as not to interfere with the ventilation plenums.
- 8.1.2. The door must be installed in the direction of egress and must be capable of fully swinging open.
- 8.1.3. Provide at least 36 inches of setback for the door to open, (Figure 11).

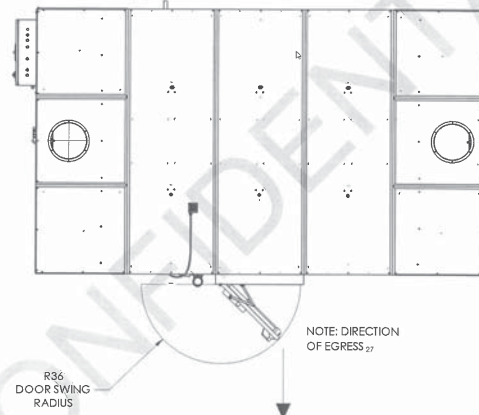


Figure 11: HAL Model 150U door swing radius.

- 8.1.4. A 36" Class I, Division 2 radius exists around all directions from the door, (Figure 5).
- 8.1.5. All components within this radius must be rated for hazardous locations.
- 8.1.6. The door closer is fully adjustable, and automatic.

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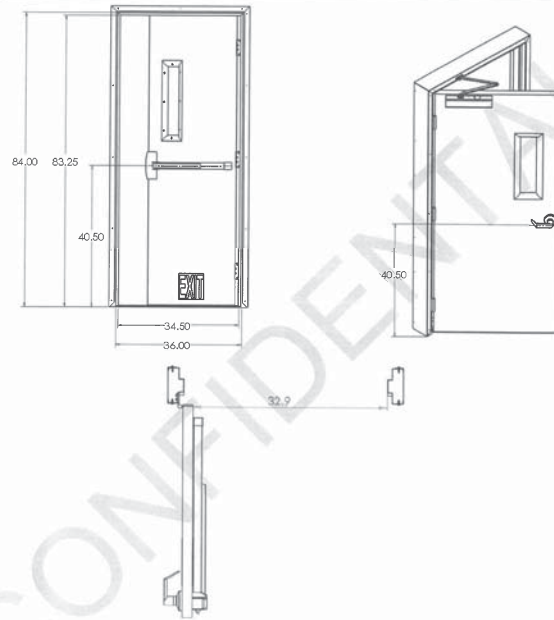


Figure 12: HAL Extraction Booth Door Closer ADA Compliance.

- 8.1.7. The design ensures flexible installation and ADA compliance, (Figure 12),
- 8.1.8. Door closer standards and listing are:
 - 8.1.8.1. Fully adjustable size 1-6

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- 8.1.8.2. Separate adjustable general speed, latch speed, and bench check.
- 8.1.8.3. Non-handed for left or right swinging doors
- 8.1.8.4. 1-1/4" diameter heat-treated steel piston and pinion.
- 8.1.8.5. UL list and compliant to UL10C and UBC 7-2 (1997).
- 8.1.8.6. Cover is UL approved for use in fire rated assemblies.
- 8.1.8.7. Meets American Disabilities Act (ADA) and ANSI A117.1.
- 8.1.8.8. ANSI / BHMA A156.4 Grade 1.

8.2. ADA Compliance⁷

- 8.2.1. No door threshold is provided with the door assembly.
- 8.2.2. Acceptable route to and from the extraction booth.
 - 8.2.2.1. Doorways.
 - 8.2.2.2. Ramps.
 - 8.2.2.3. Curb ramps excluding the flared sides.
 - 8.2.2.4. Elevator or platform lifts.
- 8.2.3. Acceptable route slopes to and from the extraction booth.
 - 8.2.3.1. The running slope of walking surfaces shall not be steeper than 1:20.
 - 8.2.3.2. The cross slope of walking surface shall not be steeper than 1:48.
- 8.2.4. Acceptable clear widths to and from the extraction booth.
 - 8.2.4.1. The width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum, (Figure 13).

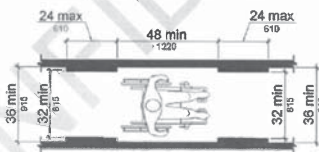


Figure 13: ADA Compliance width requirement.

- 8.2.4.2. The width for routes that makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn, (Figure 14).

⁷ 2010 ADA Standard for Accessible Design.

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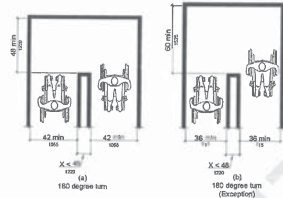


Figure 14: ADA Compliance turnaround width requirement.

9. Electrical



Figure 15: HAL Control Panel.

9.1. Control Panel (Figure 15)

- 9.1.1. The control panel requires a dedicated 208VAC – 240VAC single phase + neutral, (25 AMP circuit Classic Series) and (40 AMP circuit Production Series).
- 9.1.2. All power distribution for each electrical component is provided within the control panel, for 240 VAC 3-phase, 120VAC 1-phase, and 24VDC.
- 9.1.3. Power is converted from 1-phase to 3-phases for the fans motor at the variable frequency drives, (VFD).
- 9.1.4. Optional power receptacles must be wired to a separate building circuit per their required application.

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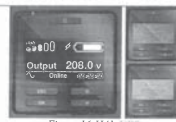


Figure 16: HAL UPS

9.2. Uninterrupted Power Supply (UPS)* (Figure 16)

- 9.2.1. Available in five configurations for Classic and Production series.
- 9.2.1.1. LG125S
- 9.2.1.1.1. 120/120VAC Single Phase.⁹
- 9.2.1.2. LG250S
- 9.2.1.2.1. 120/120VAC Single Phase.⁹
- 9.2.1.3. APCSRT2BP2
- 9.2.1.3.1. 208/240VAC Single Phase.
- 9.2.1.4. APCSRT3BP
- 9.2.1.4.1. 208/240VAC Single Phase.
- 9.2.1.5. APCSRT4BP
- 9.2.1.5.1. 208/240VAC Single Phase.

	Componentry				
	Gas Detection / Alarms / Single Emergency Ceiling Light				
	No Intake Fan No Exhaust Fan	Partial Loads**		Full Loads*	
		1-HP Fans	2 HP Fans	1 HP Fans	2HP Fans
Greater than 2 Hour Run Time	2 Hour Run Time				
LG125S	X				
LG250S	X	X			
APCSRT2BP		X		X	
APCSRT3BP		X	X	X	
APCSRT4BP		X	X	X	X

*All HAL Extraction Booth UPS systems have been sized by an electrical engineer to ensure proper functionality and user safety, based upon time dependent loads.

⁹ Supplied from the control panel.

*Full Load: Implies running the intake and exhaust fans at purge flow-rate over the duration of the time period.

**Partial Load: Implies running the intake and exhaust fans at purge flow-rate for 25% and base flow-rate for 75% of run time.

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9.3. Control Components Matrix

9.3.1. Main Line Power Feed			
Conduit Connection	Voltage	Amperage	Wire Gauge
C7	208VAC – 240VAC (1PH)	25A ¹⁰ / 40A ¹¹	10 ¹⁰ / 8 ¹¹

9.3.2. Fans, (Figure 17)				
Conduit Connection	Description	Voltage	Amperage	Wire Gauge
C6	1 HP Intake / Exhaust	208VAC (3 PH)	3A	14
C6	2 HP Intake / Exhaust	208VAC (3 PH)	5A	14

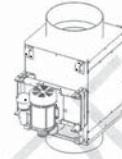


Figure 17: HAL Fans

9.3.3. Ceiling Lights, (Figure 18)			
Conduit Connection	Voltage	Amperage	Wire Gauge
C5	120VAC (1 PH)	.22A	14

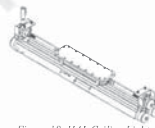


Figure 18: HAL Ceiling Lights

9.3.3.1. One interior light is wired to the UPS and is dedicated to emergency lighting in the event of a power outage.

¹⁰ 1 HP Intake / Exhaust Fan
¹¹ 2 HP Intake / Exhaust Fan
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9.3.4. Infrared Gas Sensor / Transmitter, (Figure 19)			
Conduit Connection	Voltage	Amperage	Wire Gauge
C9	24VDC	< .1875A MAX	18

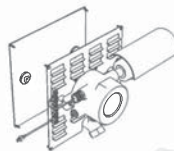


Figure 19: HAL gas detection sensor

9.3.4.1. The gas detection sensor is rated for Class I Division 1 hazardous locations and must be installed inside of the booth within 12" from the floor on the center panel of the exhaust plenum.

9.3.4.2. Hard rigid conduit is provided for the gas detection sensor assembly and must be installed to the requirements defined in NFPA / NEC 70 within the Class I Division 1 zone.

9.3.5. Exterior Strobe Alarm, (Figure 20)			
Conduit Connection	Voltage	Amperage	Wire Gauge
C4	24VDC	.150A	18



Figure 20: HAL Exterior Strobe Alarm

9.3.5.1. The exterior strobe alarm is rated for Class I Division 2 hazardous locations and must be installed in a clearly visible location next to the door.

9.3.5.2. Conduit for the exterior strobe alarm within the Class I Division 2 zone must be the liquid tight conduit and installed with the provided sealing fitting.

9.3.6. Interior Horn, (Figure 21)¹²

Conduit Connection	Voltage	Amperage	Wire Gauge
C2	24VDC	.16A	18
NRTL: UL			



Figure 21: HAL Interior Horn

- 9.3.6.1. The interior horn is rated for Class I Division 1 hazardous locations.
- 9.3.6.2. The interior horn must be installed inside of the extraction booth, preferably adjacent to the door.

9.3.7. Exterior Horn, (Figure 22)

Conduit Connection	Voltage	Amperage	Wire Gauge
C2	24VDC	.22A	18
NRTL: UL / UL-C / CSA / FM			

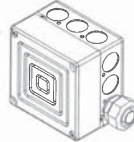


Figure 22: HAL Exterior Horn

- 9.3.7.1. The exterior horn is not rated for hazardous locations.
- 9.3.7.2. The exterior horn may be installed in any non-classified area that is audible from the inside the extraction booth.

¹² Optional equipment
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9.3.8. Interior Strobe Alarm, (Figure 23)

Conduit Connection	Voltage	Amperage	Wire Gauge
C3	24VDC	0.8A	18
NRTL: UL / UL-C			



Figure 23: HAL Interior Strobe Alarm

- 9.3.8.1. The interior strobe alarm will activate if the gas detection sensor, senses flammable gas concentration exceeding 10% Lower Explosive Level (LEL).
- 9.3.8.2. Multiple color options available.

9.3.9. Universal Power Supply, (Figure 24)

Conduit Connection	Voltage	Amperage	Wire Gauge
C8	120VAC - 240VAC	3A ¹³ - 30A ¹⁴	10 ¹³ - 8 ¹⁴
NRTL: UL			

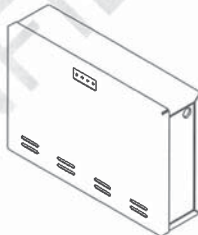


Figure 24: HAL Universal Power Supply

¹³ 1 HP Intake / Exhaust Fan
¹⁴ 2 HP Intake / Exhaust Fan
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9.3.10. Mode Switch, (Figure 25)			
Conduit Connection	Voltage	Amperage	Wire Gauge
C4	Normal Open Contact - No Power Draw NRTL: UL / CSA / CE	n/a	18



Figure 25: HAL Mode Switch

9.3.11. Panic Button, (Figure 26)				
Conduit Connection	Description	Voltage	Amperage	Wire Gauge
C3	Panic Button	Normal Open Contact - No Power Draw NRTL: UL / CSA	n/a	14

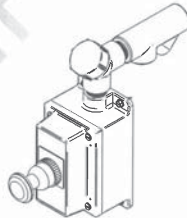


Figure 26: HAL Panic Button

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9.4. Customer Connection Sheet Index, (Figure 27)

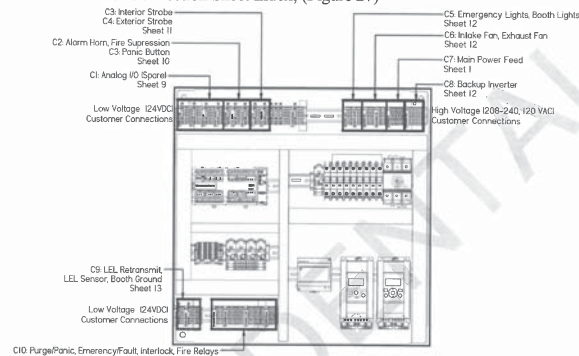


Figure 27: HAL Control Panel Connections

9.5. Schematics

9.5.1. See Appendix A for wiring connections.

9.6. Sequence of Operations

9.6.1. User Input Modes

HAL Extraction Booth User Input Modes	
MODE	ACHIEVED BY
Stand By	Controller Switch "OFF"
Short Term Storage	Controller Switch "FAN"
Operating	Controller Switch "FAN + LIGHTS"
Panic (Manual Purge State)	Panic Button "BUTTON PUSHED IN"

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9.6.2. Interlock Relay Table

LEL State	Fire		Exhaust Fan Fault		Inside Fan Fault		Sensor Ph.		Panic		Fan F-L		Standby	
	Wet + No Damper	Dry, Wet + Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper	Wet + No Damper
LEL State	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Fans ON Relay	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Fans High Speed Relay	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Exhaust Fan Fault	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Interlock Relay	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire Alarm	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Booth State	5	1	1	1	1	1	1	1	1	1	1	1	1	1

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9.6.3. Operations Table

OPERATING STATE			
Stand-By			
LEL RANGE	ALARM	DANGER LEVEL	ACTION
0%	OFF	SAFE	None (Normal Condition)
COMPONENTS			
Fans	STATUS OFF		
Gas Detection System	ON - Detecting flammable gas concentration between 0%-10% LEL		
Inside Ceiling Lights	OFF		
Light Alarm	OFF		
Sound Alarm	OFF		
Equipment Interlock Relay	No Power, Interlocked Equipment: Non-Functional		

OPERATING STATE			
Normal / Base			
LEL RANGE	ALARM	DANGER LEVEL	ACTION
0% - 10%	OFF	SAFE	None (Normal Condition)
COMPONENTS			
Fans	STATUS ON: Half Speed (~1000 CFM) / (~1500 CFM ¹⁰)		
Gas Detection System	ON - Detecting flammable gas concentration between 0%-10% LEL		
Inside Ceiling Lights	ON, Operating Mode OFF, Short Term Storage Mode		
Light Alarm	OFF		
Sound Alarm	OFF		
Equipment Interlock Relay	Solenoid Powered, Interlocked Equipment: Functional		

¹⁰ Production Series
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OPERATING STATE			
Purge / Panic			
LEL RANGE	ALARM	DANGER LEVEL	ACTION
10% - 25%	ON	UNSAFE	Flammable Gas Detected - Do Not Open Door
COMPONENTS		STATUS	
Fans		ON: Full Speed (~2000 CFM) / (~3000 CFM ¹³)	
Gas Detection System		ON - Detecting flammable gas concentration between 10%-25% LEL	
Inside Ceiling Lights		ON	
Light Alarm		ON	
Sound Alarm		OFF	
Equipment Interlock Relay		Solenoid Powered, Interlocked Equipment: Functional	

OPERATING STATE			
Emergency			
LEL RANGE	ALARM	DANGER LEVEL	ACTION
25%	ON	UNSAFE	Leave extraction area until Warning Horn is no longer active
COMPONENTS		STATUS	
Fans		ON: Full Speed (~2000 CFM) / (~3000 CFM ¹³)	
Gas Detection System		ON - Detecting flammable gas concentration between 25% LEL	
Inside Ceiling Lights		ON	
Light Alarm		ON	
Sound Alarm		ON	
Equipment Interlock Relay		No Power, Interlocked Equipment: Non-Functional	

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OPERATING STATE			
Fire Suppression			
LEL RANGE	ALARM	DANGER LEVEL	ACTION
0% - 25%	Building Fire Alarm	UNSAFE	Evacuate Building
		Dry Powder FSS OR Exhaust Duct with Fire Damper	Sprinkler Based FSS
COMPONENTS		STATUS	
Fans		OFF	ON: Full Speed (~2000 CFM) / (~3000 CFM ¹²)
Gas Detection System		ON	ON
Inside Ceiling Lights		ON, Operating Mode OFF, Short Term Storage	ON, Operating Mode OFF, Short Term Storage
Light Alarm		ON	Signal Only if Gas Detection System detect >10% LEL
Sound Alarm		ON	Signal Only if Gas Detection System detect >10% LEL
Equipment Interlock Relay		No Power, Interlocked Equipment: Non-Functional	

¹² Production Series
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OPERATING STATE			
Equipment Fault			
LEL RANGE	ALARM	DANGER LEVEL	ACTION
No Signal	Horn (Intermittent)	UNSAFE	Cease all extraction processes, remove all flammable liquid containers from booth, debug gas detector and/or ventilation until it is functioning normally.
COMPONENTS		STATUS: Gas Detection Fault	STATUS: Ventilation System Fault
Fans		ON: Full Speed (~2000 CFM) / (~3000 CFM ^{1,2})	Exhaust Fan: Full Speed in Intake Air Fan Fault Intake Air Fan: Off if Exhaust Fan Failed
Gas Detection System		OFF	ON
Inside Ceiling Lights		ON	ON
Light Alarm		No Signal	Signal Only if Gas Detection System detect >10% LEL
Sound Alarm		Siren On (Intermittent Signal)	
Equipment Interlock Relay		No Power, Interlocked Equipment: Non-Functional	

10. HVAC

10.1. Duct Design

- 10.1.1. HVAC systems and ducting should be designed by a mechanical engineer.
- 10.1.2. The intake and exhaust fans can be installed on either side of the extraction booth.
- 10.1.3. The intake air plenum must be installed with the provided perforated plates.
- 10.1.4. The intake and exhaust fans cannot be mounted on the booth but, can be located anywhere in line with the ducting.
- 10.1.5. The exhaust duct outlet must be routed to comply with all distance requirements defined in NFPA 33.7.4, (Figure 28).

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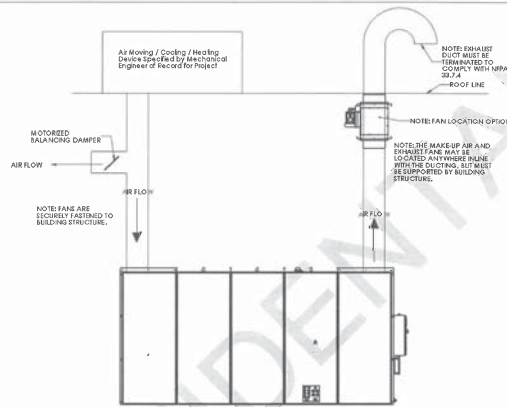


Figure 28: HAL HVAC Reference

- 10.1.6. The extraction booth is equipped with two 20" square in-line centrifugal exhaust fans.
- 10.1.7. Ducting is required for the exhaust fan and must be vented to the outdoors.
- 10.1.8. Ducting for intake air may be used as needed, as intake air ducting is unclassified where exhaust air is not recirculated.
- 10.1.9. All ducting shall be constructed of steel.

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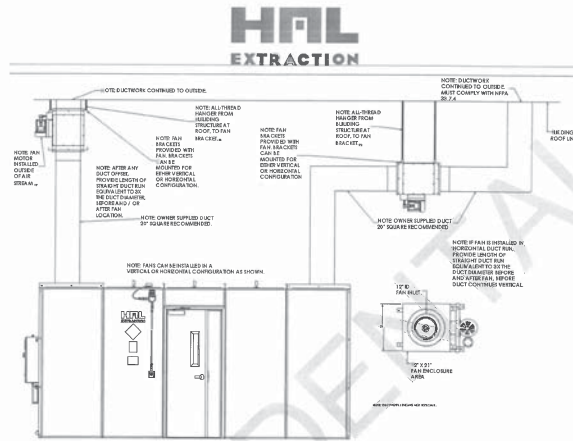


Figure 29: HAL HVAC Ducting Offset Example

- 10.1.10. All ducting must be designed to not exceed 1.0 inches W.C. of static pressure.
- 10.1.11. Exhaust ducts are recommended to be routed to the outdoors in as straight of a duct run as possible, minimizing offsets.
- 10.1.12. After any duct offset provide length of straight duct run equal to 3 times the duct diameter before and after the fan, (Figure 29).
- 10.1.13. If more than one booth is installed in the same facility, exhaust ducts are required to be ducted to the outdoors separately.
- 10.1.14. Multiple exhaust ducts should NOT be designed into a manifold.

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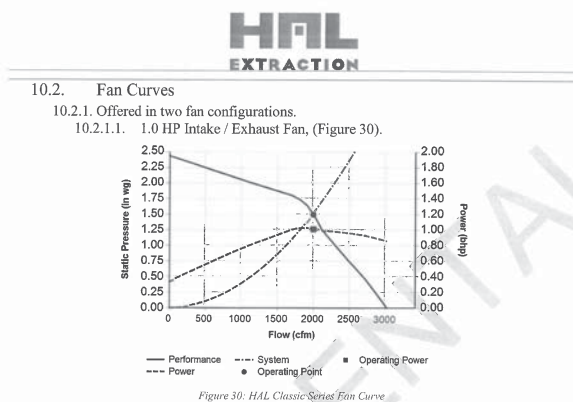


Figure 30: HAL Classic Series Fan Curve

- 10.2. Fan Curves
- 10.2.1. Offered in two fan configurations.
- 10.2.1.1. 1.0 HP Intake / Exhaust Fan, (Figure 30).

- 10.2.1.2. 2.0 HP Intake / Exhaust Fan, (Figure 31).

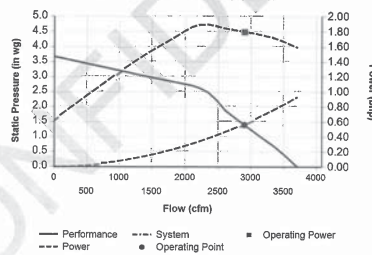


Figure 31: HAL Production Series Fan Curve

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10.3. Pressure Drop and Balancing, (Figure 32)

- 10.3.1. The HVAC system should be designed and balanced to create a net negative pressure inside of the booth for all operating conditions.
- 10.3.2. The pressure inside of the booth should not exceed -0.02 inches W.C. relative to the external environment.
- 10.3.3. Balancing efforts of the fans, and/or balancing of dampers in the intake and exhaust duct will be required to achieve net negative pressure in the booth.

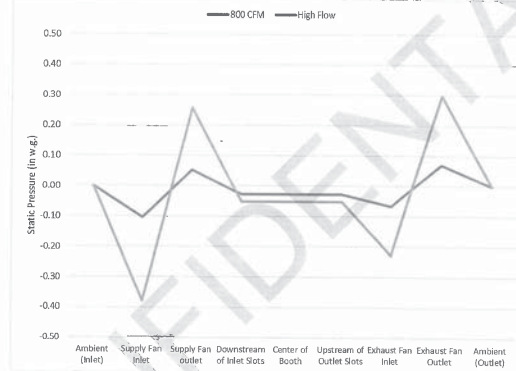


Figure 32: HAL Extraction Booth Static Pressure

- 10.3.4. Fan speeds can be adjusted by the operator using the human machine interface (HMI).
- 10.3.5. The extraction booth creates 0.4 inches W.C. of static pressure.
- 10.3.6. The intake and exhaust air fans operate ideally below 1.50 inches W.C. This gives a limit of adding ~1.00 inches W.C. of static when adding any additional components to the ductwork - duct offsets, heating / cooling coils, filters, etc.

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10.4. Tempered Air Options

- 10.4.1. General Considerations
 - 10.4.1.1. HVAC components can be added as needed, with consideration taken to duct static pressure impacts. These components are not required to be rated for hazardous locations when located in the intake air duct.
 - 10.4.1.1.1. Separate line components in the intake air duct are not required to be rated for hazardous locations.
 - 10.4.1.2. Reference NFPA 58.10.2.3 for specifics on heat transfer mediums.
- 10.4.2. Example 1
 - 10.4.2.1. For tempered air to be provided to the booth, without pulling in surrounding building space air, a potential solution is, (Figure 28).
 - 10.4.2.1.1. Some type of air handling equipment as specified by the mechanical engineer on record is installed on the roof.
 - 10.4.2.1.2. The fan motor serving the unit would be sized to provide airflow constantly at the purge airflow rate (~2000 CFM).
 - 10.4.2.1.3. To regulate airflow as to not over pressurize the booth at base airflow rate, a balance damper with a modulating damper actuator would be installed in the ductwork.
 - 10.4.2.1.4. The damper would be balanced to be half open at base airflow to allow only the (~1000 CFM) volume into the booth.
 - 10.4.2.1.5. All excess air would be routed into the surrounding building space.
 - 10.4.2.1.6. When the Extraction Booth reaches purge mode, the damper would close, directing all (~2000 CFM) into the booth.
- 10.4.3. Example 2
 - 10.4.3.1. Intake air fan pulls directly from the building air in the space the extraction booth is installed.
 - 10.4.3.1.1. Enough make-up air must be provided to the building to accommodate the constant exhaust flow.
 - 10.4.3.1.2. A damper to the building can be activated by the HAL control panel, when the booth enters the purge state.

10.5. Damper Contacts to Control Panel

- 10.5.1. HAL Extraction recommends a 24VDC damper actuator. The damper can be modulated and controlled through the programming of the booth's PLC
- 10.5.2. For any auxiliary ductwork components, there are relays with normally open and normally closed contacts within the extraction booth control panel that fire at each level of air flow state.

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- 10.5.3. Relays can be used in order to control external HVAC devices such as motorized dampers, fire dampers, external motor VFDs, etc. that need to operate in line with the extraction booth.
- 10.5.4. Dampers can be operated with the 24VDC power supply in the control panel.
- 10.6. Odor Mitigation
- 10.6.1. Systems can be designed to include odor mitigation.
- 10.6.2. For best results use activated carbon filters.
- 10.6.2.1. The largest amount of static pressure comes from activated carbon filter, be sure to be aware of static pressure threshold.
- 10.6.3. For best results install odor mitigation at the roof top level immediately prior to ducting to atmosphere.
- 10.6.4. Must ensure that selected equipment can still maintain booth pressure and flow requirements.
- 10.6.5. Must ensure that selected equipment exhaust odor mitigation equipment meet NFPA 33.7.3. thru 33.7.8.
- 10.7. Damper Contacts to Control Panel
- 10.7.1. Relays can be used in order to control external HVAC devices such as motorized dampers, fire dampers, external motor VFDs, etc. that need to operate in line with the extraction booth.
- 10.8. HMI (Human Machine Interface)



Figure 33: HAL HMI Home Screen

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- 10.8.1. The HMI on the front of the Extraction Booth control panel allows the user to interact with the booth in real time, (Figure 33).
- 10.8.2. The user can confirm operation, take real time readings of sensors, and make changes to the ventilation system when necessary.
- 10.8.3. The home screen of the HMI displays fan speed, LEL %, and current booth state, (Figure 34).
- 10.8.4. This can be observed to confirm that the exhaust and intake fans are operating at the percentages they are required at each booth state.
- 10.8.4.1. - 50% fan speed at Base Air Flow State.
- 10.8.4.2. - 100% fan speed at Purge Air Flow State.
- 10.8.5. If fans are operating at abnormal levels, these fan speed percentages can be adjusted back to correct levels through the HMI as well.



Figure 34: HAL HMI Status Read Out

- 10.8.6. The fan speeds at each booth state can be manually over-riden only by users with login credentials that allow such booth manipulation.
- 10.8.6.1. If the user has a scenario where they will need full speed fan operation, the fans can be run at 100% by user input.
- 10.8.7. Generally, a negative pressure inside of the booth is achieved by the intake air fan running at a slightly lower speed than the exhaust fan.
- 10.8.8. The fan levels can be adjusted to achieve the ideal negative pressure within the booth.

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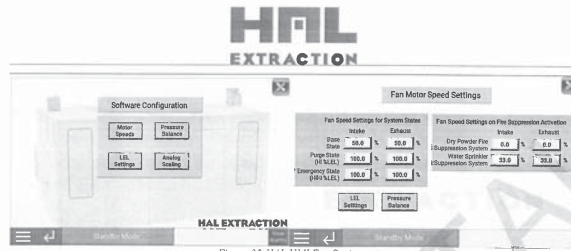


Figure 35: HAL HMI Fan Settings

10.8.9. Login credentials are required to make any and all changes from the extraction booth factory settings, (Figure 36).

10.8.10. At any time, all settings can be reverted to factory settings through the HMI.

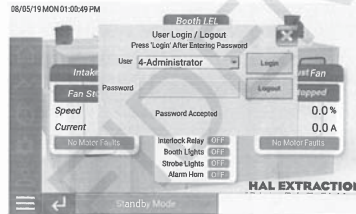


Figure 36: HAL HMI Logins

11. Fire Suppression. (Figure 37, Figure 38, and Figure 39)

11.1. Compliance

- 11.1.1. Please consult with a fire suppression engineer to make sure you comply with regulations for your authority having jurisdiction, (AHJ).
- 11.1.2. Applicable codes include but are not limited to NFPA 1 Chapter 38, NFPA 13 NFPA 33 standard for spray application using flammable or combustible materials.
- 11.1.3. Fire suppression systems should be installed in the booth by a licensed fire systems contractor.

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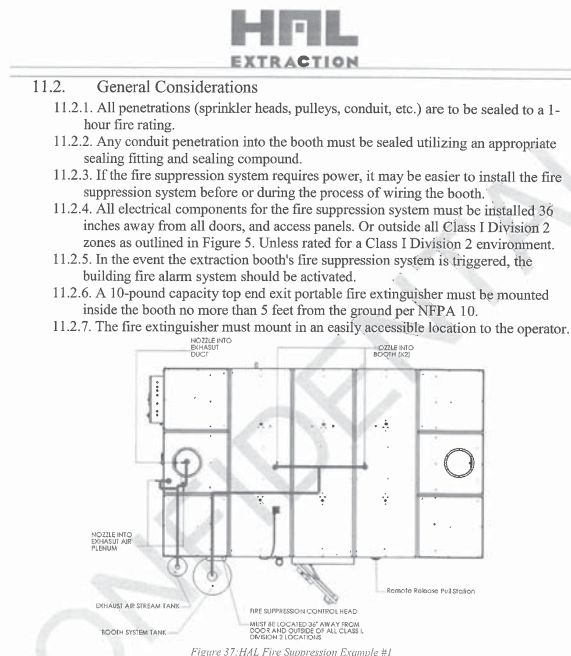


Figure 37: HAL Fire Suppression Example #1

11.3. Non-Fire Rated Panels

- 11.3.1.1. The panels on the standard extraction booth are not fire rated and must maintain proper distances from the building walls and ceilings as defined in NFPA 33.5.

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11.4. Fire Rated Panel

- 11.4.1.1. Optional 2-hour rated fire panels are available.¹³

11.5. Integrated Fire Suppression Systems

- 11.5.1. Can be setup to accommodate two fire suppression systems.
 - 11.5.1.1. Existing building systems
 - 11.5.1.2. Standalone UL-Listed systems
- 11.5.2. Can also accommodate three fire suppression media types.
 - 11.5.2.1. Water based
 - 11.5.2.2. Dry Powder based.
 - 11.5.2.3. Clean agent.

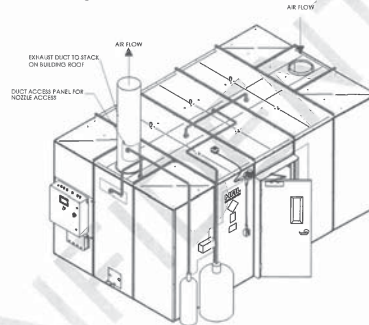


Figure 38: HAL Fire Suppression Example #2

¹³ Consult your sales representative for more information.
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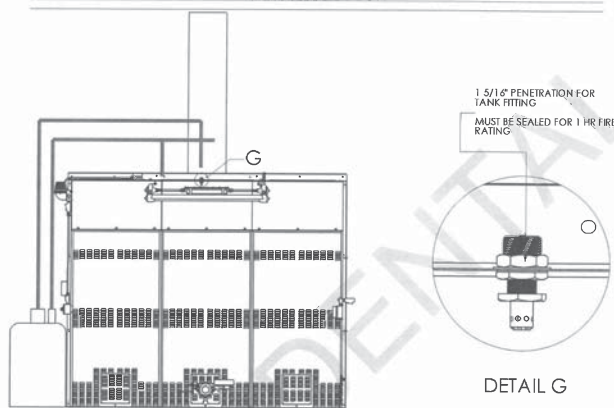


Figure 39: HAL Fire Suppression Example #3

11.6. Control system interlock functionality.

11.6.1. Automatic Sprinkler Systems

- 11.6.1.1. Spray heads should be placed in the work area, exhaust plenum, and exhaust duct, booth ventilation systems should remain operational.

11.6.2. Dry Powder Systems

- 11.6.2.1. The fire suppression trigger should turn off the booth ventilation fans, as to not evacuate the fire suppressant medium.

11.6.3. See electrical circuit diagram for connection point.

11.7. Control Panel Integration

- 11.7.1. HMI allows the ability to pre-define fire system media type on initial setup.
- 11.7.2. Pre-defining media type allows the HMI to determine the best method to handle a fire if sensed.

	Fire Suppression State	
	Dry Powder / Clean Agent & Or Exhaust Duct with Fire Damper*	Sprinkler Based FSS
Components	Status	Status
Fans	Off	On
Lights	On, Operating Mode. Off, Short Term Storage Mode.	On, Operating Mode. Off, Short Term Storage Mode.
10% LEL Visual Beacon	Signal Only If Gas Detection System Detects >10% LEL	Signal Only If Gas Detection System Detects >10% LEL
25% LEL Warning Beacon	Signal Only If Gas Detection System Detects >25% LEL	Signal Only If Gas Detection System Detects >25% LEL
25 LEL Relay	Solenoid Powered Only If Gas Detection System Detects >25% LEL	Solenoid Powered Only If Gas Detection System Detects >25% LEL
Equipment Interlock Relay	No Power, Interlocked Equipment, Non-Functional	No Power, Interlocked Equipment, Non-Functional
FSS Relay	Solenoid Powered	Solenoid Powered
Booth Dedicated Fire Alarm	Activated	Activated

*Fire Alarm to Be Installed By Fire Suppression Systems Contractor

12. Contact Information

12.1. Consulting

12.1.1. HAL Extraction offers consulting and installation packages.

12.1.2. If you need a custom application for your system, please reach out to HAL Extraction at 720-504-4726 Ext:1 or email us Sales@ExtractionBooth.com.

12.2. Support

12.2.1. Application specific question not answered in the previous section.

12.2.2. Contact HAL Extraction at 720-504-4726 Ext:4 or email us Support@ExtractionBooth.com.

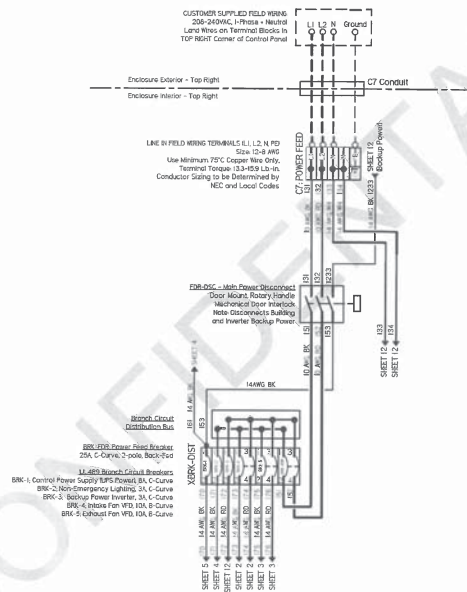
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Appendix A



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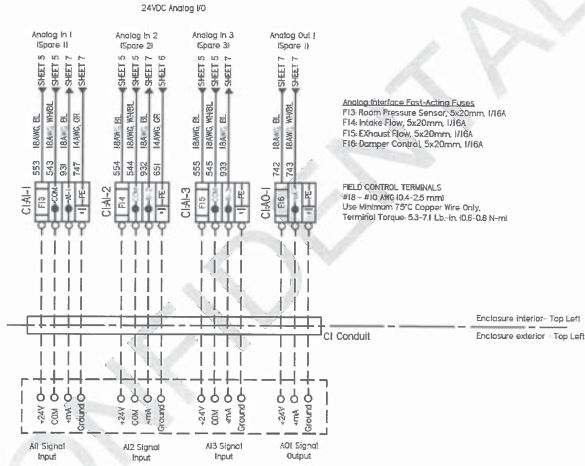
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Customer Control Field Wiring Connections
24VDC Analog Signals
Terminal Blocks Located at TOP LEFT
Corner of Control Panel



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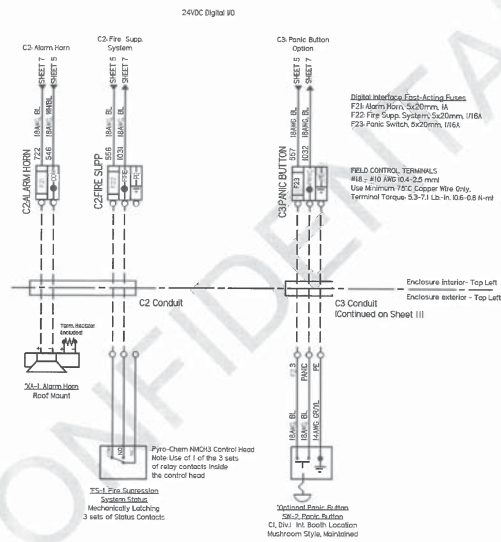
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Customer Control Field Wiring Connections
24VDC Digital Signals
Terminal Blocks Located at TOP LEFT
Corner of Control Panel



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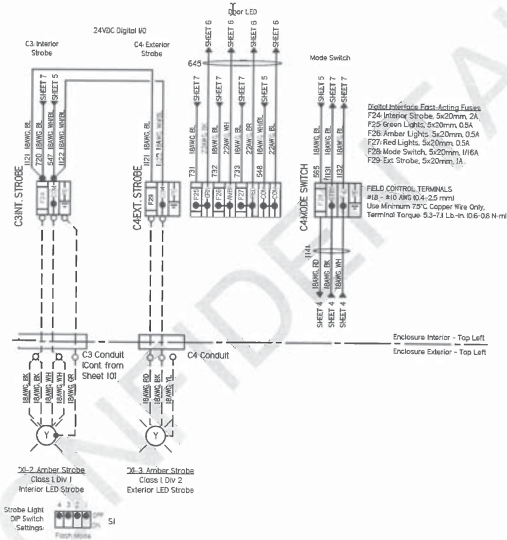
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Customer Control Field Wiring Connections 24VDC Digital Signals Terminal Blocks Located at TOP LEFT Corner of Control Panel



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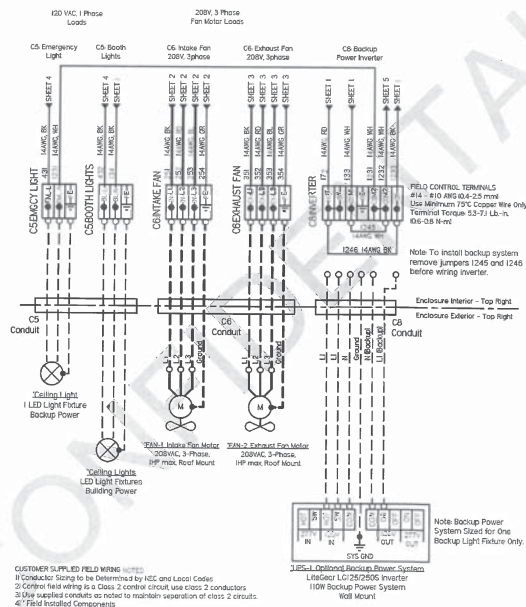
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Customer Power Field Wiring Connections AC Power Loads Terminal Blocks Located at TOP RIGHT Corner of Control Panel



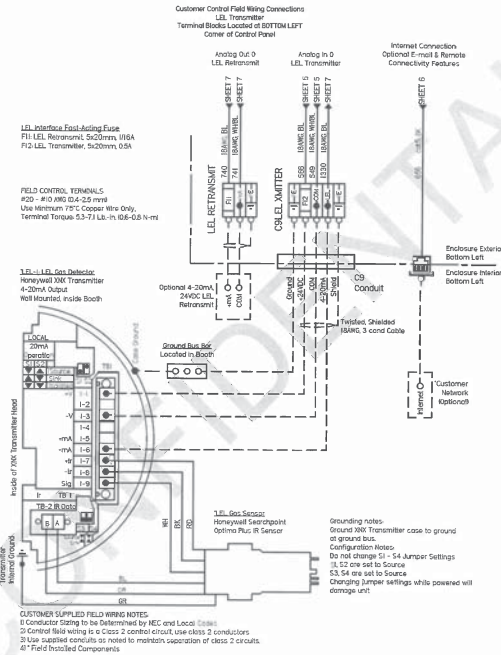
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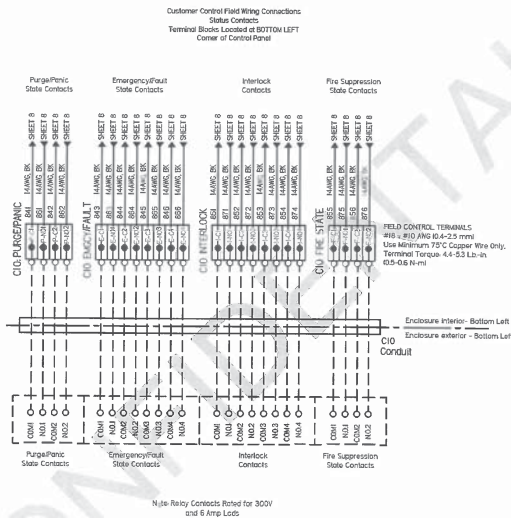
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Can-Lite™ 4"

Recommended Max CFM: 250 CFM

Prefilter: Yes

Flange: Built in 4"

Outside Diameter: 10 cm / 4"

Height: 38.1 cm / 15"

Total Weight: 4.08 kg / 9 lbs.

Carbon Weight: 2.6 kg / 5.7 lbs.

Carbon Bed Depth: 2"

Max Operating Temp: 80°C

Recommended Fan:

FAN	CFM	Max Watts
4" Can-Fan® HO S-400	165	80

Can-Lite™ 6" Mini

Recommended Max CFM: 420 CFM

Prefilter: Yes

Flange: Built in 6"

Outside Diameter: 26 cm / 10.25"

Height: 46 cm / 18.125"

Total Weight: 5.9 kg / 13 lbs. (with Box)

Carbon Weight: 4.3 kg / 9.5 lbs.

Carbon Bed Depth: 2"

Max Operating Temp: 80°C

Recommended Fan:

FAN	CFM	Max Watts
6" Can-Fan® HO	392	138
6" Max-Fan™ S-600	333	74

Can-Lite™ 8" Mini

Recommended Max CFM: 800 CFM

Prefilter: Yes

Flange: Built in 8"

Outside Diameter: 31 cm / 12.25"

Height: 69 cm / 27.25"

Total Weight: 14.5 kg / 32 lbs. (with Box)

Carbon Weight: 9.3 kg / 20.5 lbs..

Carbon Bed Depth: 2"

Max Operating Temp: 80°C

Recommended Fan:

FAN	CFM	Max Watts
8" Can-Fan® HO	722	277
8" Max-Fan™	675	168
8" Max-Fan™ HO S-800	932	213

Up to
10%

More virgin activated
Australian RC Light Weight
Granular Carbon.



2"

Bed depth of pure,
virgin activated
Australian RC Light Weight
Granular Carbon.

51%

Perforated open area
for maximum air flow.

2.5

Up to 2.5 years
life expectancy.
Packet Page 73

Samsung FJM Series, Wind-Free™ Mini 4-Way Cassette

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference _____ Approval _____ Construction _____
 Schedule # _____

Specifications

Model	US Code		JNH18NDT
	Model Number		AJ018TNNDCH/AA
Performance	Nominal Capacity	Cooling (Btu/h)	17,700
		Heating (Btu/h)	19,100
Power	Voltage (øV/Hz)		1 / 208-230 / 60
	Nominal Running Current (A)		0.53
Fan	Type		Turbo (1)
	Motor	Type	BLDC (1)
		FLA / Output	0.17A / 65 W
Airflow	CFM	L/M/H	261 / 318 / 371
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve (at outdoor unit)
Piping Connections	Liquid (flare)	Inches	1/4
	Suction (flare)	Inches	1/2
	Drain	Inches	OD 1 1/4, ID 1
Unit Dimensions	W X H X D	Inches	22 5/8 X 10 X 22 5/8
	Weight	lbs.	26.00
Fascia Panel ¹ (required)	Model Number (Wind-Free™)		PC4SUFMUN
	L X W X H	Inches	24 3/8 X 24 3/8 X 2 1/4
	Weight	lbs.	5.95
	Model Number (Standard)		PC4SUSMUN
	L X W X H	Inches	24 3/8 X 24 3/8 X 2 3/16
	Weight	lbs.	5.07
Sound Level	L / M / H	dB(A)	32 / 36 / 39
Accessories	Fascia Panel	Wind-Free™	PC4SUFMUN
		Standard	PC4SUSMUN
	Wired Controllers	Advanced	MWR-WG00UN
		Simple Touch	MWR-SH11UN
	Wireless Remote Controller		AR-EH03U
	Wi-Fi Adapter For Remote Control ²		MIM-H04UN
	External Temperature Sensor		MRW-TA
	External Contact Control Interface Module		MIM-B14
	Motion Occupancy Sensor		MCR-SMD
	CN83 Pigtail		DB39-01263A
	Line sets - insulated and flared, interconnect cables included		25' - ILS2507
			50' - ILS5007
Safety Certifications			ETL (UL 1995)

Nominal cooling capacities are based on: Indoor temperature: 80 °F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB.

Nominal heating capacities are based on: Indoor temperature: 70 °F DB, 60°F WB. Outdoor temperature: 47°F DB, 43°F WB.

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

*The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind Free mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

¹PC4SUFMUN fascia panel is required to use Wind-Free™ functions. Optional controls are required to enable Wind-Free™ functions. Fascia panels must be purchased separately.

²MIM-H04UN is only required for remote control of cassette, console, and duct indoor units. Only one per system is required.



• The indoor unit shall feature "Wind-Free™" mode*. When enabled, in cooling mode, as room temperature nears set temperature, the unit will close its louvers and will disperse air into the space through thousands of micro-holes on the fascia panel preventing cold air drafts on occupants by providing cool still air*.

• The Wind-Free™ 4-way cassette can be configured for 2-stage operation, cooling the space with the louver open (fixed or swing) until the room temperature nears set temperature. Once room temperature is near set temperature, Wind-Free™ operation will start automatically.

• The Wind-Free™ panel (PC4SUFMUN) has an integral humidity sensor that will open the louvers for standard cool mode when space conditions could potentially cause condensation formation on the panel surface.

• Electro-static, washable, pleated filters as standard (included with fascia panel)

• Built in condensate pump with maximum 29" lift from the bottom of the unit, check valve, and float switch that disables indoor unit during overflow detection.

• Knock-out for outside air capability (with booster fan connection)

• Fascia panel shall have LED indicator lights, IR receiver, and 4 motorized louvers with independent control.

• High-voltage terminal block temperature sensor to disable unit in the event overheating of power connection.

• The indoor unit shall be powered by the outdoor unit

• System energy consumption can be viewed using the Samsung SmartThings mobile app (not revenue grade, for reference only)

Construction

Galvanized steel frame with HIPS chassis and fascia panel certified to UL94 V0.

Heat Exchanger

The heat exchanger shall be mechanically bonded fin to copper tube

Indoor Fan

Indoor fan is a single turbo type with three fan speeds and auto setting

Controls

Control signal shall be a DDC type signal

Interconnect control wire between outdoor and indoor shall be 16AWG X 2

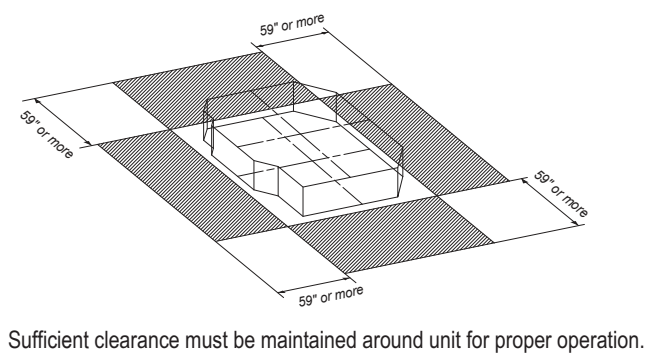
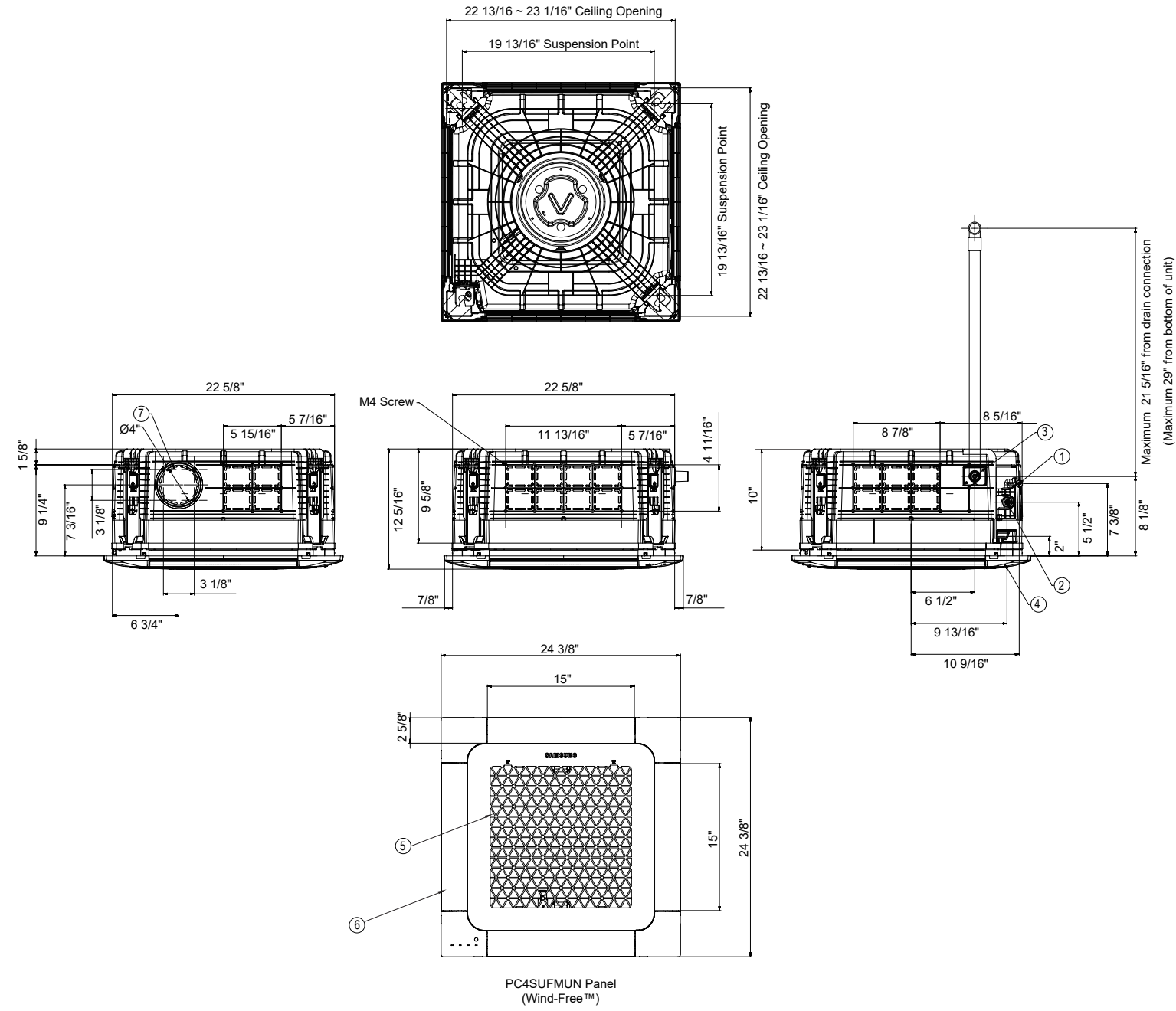
Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller.

The system shall integrate with the Samsung Controls Solution.

Compatibility

Will only operate with Samsung outdoor unit model numbers:

AJ024TXJ3CH/AA (JXH24J3T), AJ036TXJ4CH/AA (JXH36J4T), AJ048TXJ5CH/AA (JXH48J5T), AJ024TXS4CH/AA (JXH24S4T), AJ030TXS4CH/AA (JXH30S4T), AJ036TXS4CH/AA (JXH36S4T)



Sufficient clearance must be maintained around unit for proper operation.

No.	Description
1	Liquid pipe connection
2	Suction pipe connection
3	Drain connection
4	Opening for power and communication wire conduit
5	Air inlet grille
6	Supply air outlet louver
7	Fresh air intake (Ø 4")

Model: FGI-8x8

Hooded Gravity Intake Ventilator

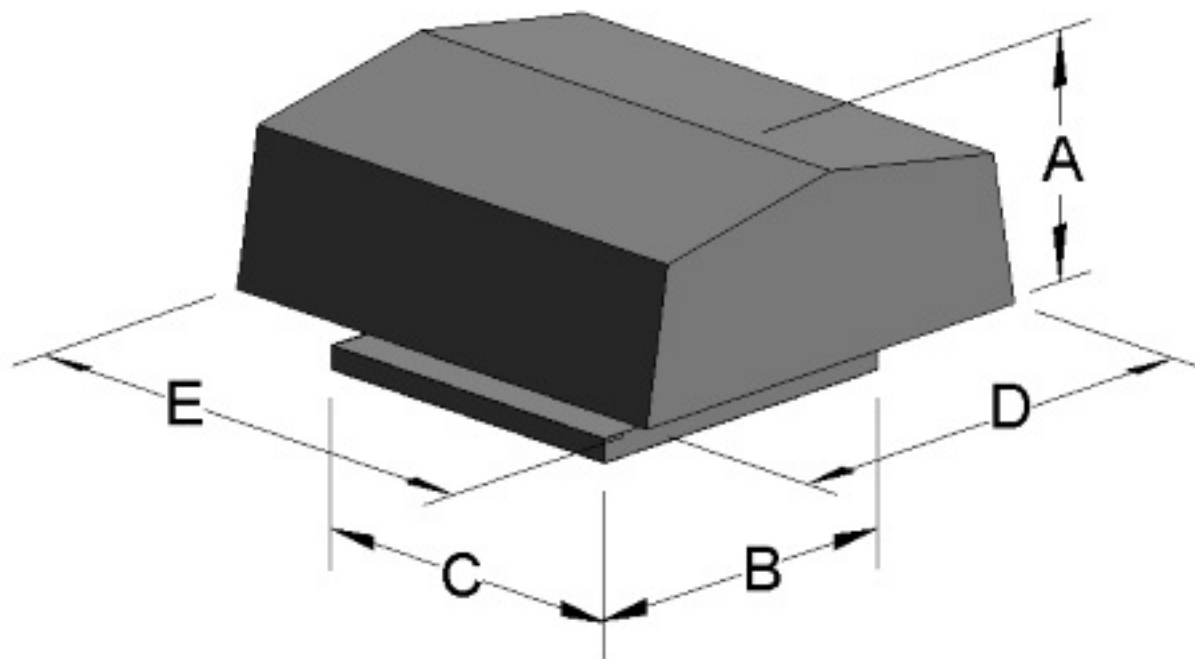
Standard Construction Features: Fabra hood design (standing seam) galvanized hood (optional aluminum). Larger sizes require field assembly.

Certifications/special requirements: Filter Required

Performance	
Application	Intake
Volume (CFM)	400
Pressure Drop (in. wg)	0.325
Throat Velocity (ft/min)	901
Max Velocity (ft/min)	1200
Installation Type	Non Ducted
Filtered	Yes

Fan Configuration	
Mounting	Curb Cap
Shipped Assembled	Yes

Dimensions and Weights		
Label	Value	Description
-	37	Weight w/o accessories (lbs)
A	15.75	Overall Height (in)
E	27	Overall Length (in)
D	22	Overall Width (in)
B	14	Curb Cap Width (in)
C	14	Curb Cap Length (in)
-	8	Throat Width (in)
-	8	Throat Length (in)
-	10.5	Roof Opening Width (in)
-	10.5	Roof Opening Length (in)



Model: G-103-VG

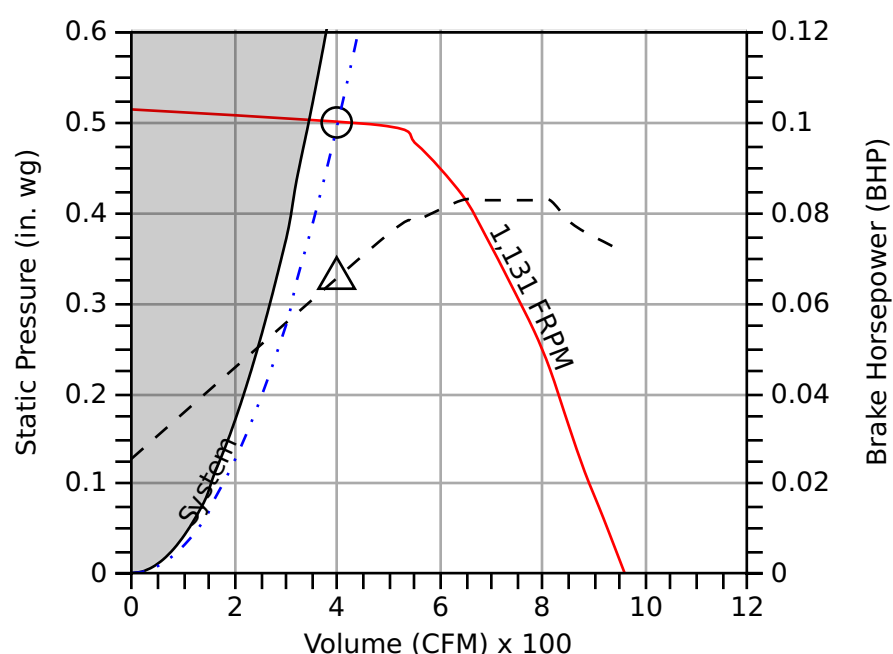
Direct Drive Centrifugal Roof Exhaust Fan

Standard Construction Features: Aluminum housing. Centrifugal backward inclined aluminum wheel. Direct driven motor mounted on vibration isolation.

Fan Configuration	
Drive type	Direct

Performance	
Requested Volume (CFM)	400
Actual Volume (CFM)	400
Total External SP (in. wg)	0.5
Fan RPM	1,131
Operating Power (bhp)	0.07
Startup Power (bhp)	0.07
Air Stream Temp (F)	70
Start-up Temp (F)	70
Air Density (lbs/ft ³)	0.075
Elevation (ft)	100
Static Efficiency (%)	48
Outlet Velocity (ft/min)	444

Motor	
Enclosure	ODP
Size (hp)	1/4
V/C/P	115/60/1
NEC FLA (Amps)	3.7



- Fan curve
- - - Brake horsepower curve
- Operating Point SP
- △ Operating Bhp point
- Max system curve
- · · System curve

Sound

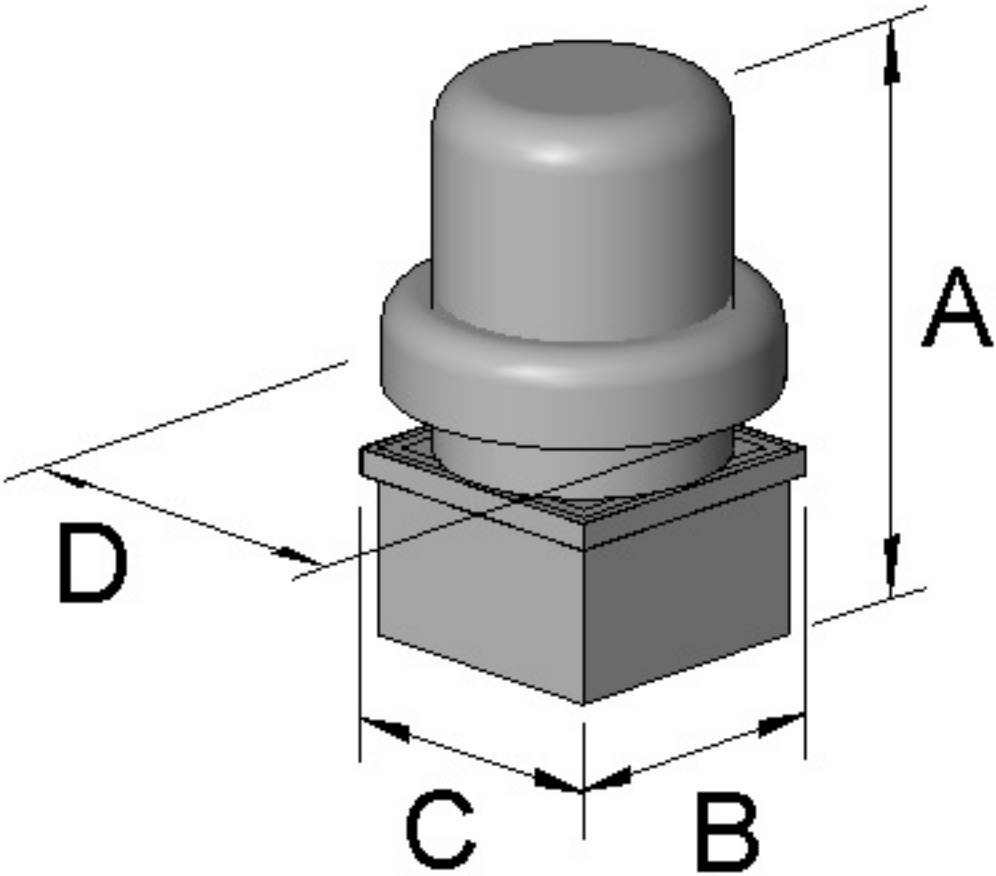
	Octave Bands (hz)								LwA	dBA	Sones
	62.5	125	250	500	1000	2000	4000	8000			
Inlet	64	63	61	53	44	42	37	30	56	44	3.7



Greenheck Fan Corporation certifies that the model shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA certified ratings seal applies to sound and air performance ratings only. Performance certified is for installation type A: Free inlet, free outlet. Power rating does not include transmission losses. Performance ratings include the effects of birdscreen. The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per ANSI/AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels. dBA levels are not licensed by AMCA International. The AMCA Certified Ratings Seal for Sound applies to inlet sone ratings only.

FLA - based on tables 150 or 148 of National Electric Code 2002. Actual motor FLA may vary, for sizing thermal overload, consult factory.

Dimensions and Weights		
Label	Value	Description
-	38	Weight w/o accessories (lbs)
A	36	Overall Height (in)
D	24	Overall Width (in)
B	19	Curb Cap Width (in)
C	19	Curb Cap Length (in)
-	12	Duct / Damper Width (in)
-	12	Duct / Damper Length (in)
-	14.5	Roof Opening Width (in)
-	14.5	Roof Opening Length (in)



*All dimensions are in inches.

**127A
PREFERRED™ SERIES 2-STAGE AIR CONDITIONER
WITH PURON® REFRIGERANT
2 TO 5 TONS**



PRODUCT DATA



Bryant Air Conditioners with Puron® refrigerant provide a collection of features unmatched by any other family of equipment. The 127A has been designed utilizing Bryant's Puron refrigerant. The environmentally sound refrigerant allows you to make a responsible decision in the protection of the earth's ozone layer.

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. Refer to the combination ratings in the Product Data for system combinations that meet Energy Star® guidelines.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

INDUSTRY LEADING FEATURES / BENEFITS

Efficiency

- Up to 17.0 SEER / Up to 13.0 EER
- Microtube Technology™ refrigeration system
- Indoor air quality accessories available

Sound

- Sound level as low as 72 dBA

Comfort

- System supports Thermidistat™ or standard 2-stage thermostat controls

Reliability

- Puron® refrigerant - environmentally sound, won't deplete the ozone layer and low lifetime service cost.
- Front-seating service valves
- 2-stage scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Low pressure switch
- High pressure switch
- Filter drier
- Balanced refrigeration system for maximum reliability

Durability

Duragaurd Plus™ protection package:

- Solid, Durable sheet metal construction
- Steel louver coil guard
- Baked-on, complete outer coverage, powder paint

Applications

- Long-line - up to 250 feet (76.2 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient cooling (down to 0°F / -17.8°C) with approved low ambient accessory kits.

MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	14
N	N	N	A	A/N	N	N	N	N	A/N	A/N	N	A
1	2	7	A	N	A	0	3	6	0	0	0	A
Product Family	Tier	SEER	Major Series	Voltage	Variations	Cooling Capacity			Design Variation	Not Defined	Open	Minor Series
1=AC	2= Preferred	7=17 SEER		N= 208–230–1 or 208/230–1	A = Standard							



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



ISO 9001
QMI-SAI Global



This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturing refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**

STANDARD FEATURES

FEATURES	Unit Size – Series			
	024–B	036–B	048–B	060–C
Puron Refrigerant	X	X	X	X
Maximum SEER Rating*	17.0	17.0	17.0	16.0
2–Stage Scroll Compressor	X	X	X	X
Low Ambient Cooling Capability with Approved Kits	X	X	X	X
Crankcase Heater w/Temperature Switch	O	O	X	X
Louvered Coil Guard	X	X	X	X
Field Installed Filter Drier	X	X	X	X
Front Seating Service Valves	X	X	X	X
Internal Pressure Relief Valve	X	X	X	X
Internal Thermal Overload	X	X	X	X
Long Line capability	X	X	X	X
Low Pressure Switch	X	X	X	X
High Pressure Switch	X	X	X	X

X = Standard O = Accessory

* With approved combinations

REFRIGERANT PIPING LENGTH LIMITATIONS

Liquid Line Sizing and Maximum Total Equivalent Lengths[†] for Cooling Only Systems with Puron® Refrigerant:

The maximum allowable length of a residential split system depends on the liquid line diameter and vertical separation between indoor and outdoor units.

See Table below for liquid line sizing and maximum lengths :

Maximum Total Equivalent Length Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/TXV	AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit BELOW Indoor Vertical Separation ft (m)								
			0-5 (0-1.5)	6-10 (1.8-3.0)	11-20 (3.4-6.1)	21-30 (6.4-9.1)	31-40 (9.4-12.2)	41-50 (12.5-15.2)	51-60 (15.5-18.3)	61-70 (18.6-21.3)	71-80 (21.6-24.4)
024	3/8	1/4	75	75	75	50	50	--	--	--	--
		5/16	250*	250*	250*	250*	250*	225*	175	125	100
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
036	3/8	5/16	175	150	150	100	100	100	75	--	--
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
048	3/8	3/8	250*	250*	250*	250*	250*	250*	230	160	--
060	3/8	3/8	250*	250*	250*	225*	190	150	110	--	--

* Maximum actual length not to exceed 200 ft (61 m)

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

-- = outside acceptable range

Maximum Total Equivalent Length Outdoor Unit ABOVE Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/TXV	AC with Puron Refrigerant Maximum Total Equivalent Length [†] : Outdoor unit ABOVE Indoor Vertical Separation ft (m)							
			25 (7.6)	26-50 (7.9-15.2)	51-75 (15.5-22.9)	76-100 (23.2-30.5)	101-125 (30.8-38.1)	126-150 (38.4-45.7)	151-175 (46.0-53.3)	176-200 (53.6-61.0)
024	3/8	1/4	100	125	175	200	225*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
036	3/8	5/16	225*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
048	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
060	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*

* Maximum actual length not to exceed 200 ft (61 m)

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

REFRIGERANT CHARGE ADJUSTMENTS

Liquid Line Size	Puron Charge oz/ft (g/m)
3/8	0.60 (17.74) (Factory charge for lineset = 9 oz / 266.16 g)
5/16	0.40 (11.83)
1/4	0.27 (7.98)

Units are factory charged for 15 ft (4.6 m) of 3/8" liquid line. The factory charge for 3/8" lineset 9 oz.(266.16 g). When using other length or diameter liquid lines, charge adjustments are required per the chart above.

Charging Formula:

[(Lineset oz/ft x total length) - (factory charge for lineset)] = charge adjustment

Example 1: System has 15 ft of line set using existing 1/4" liquid line. What charge adjustment is required?

Formula: (.27 oz/ft x 15ft) - (9 oz) = (-4.95) oz.

Net result is to remove 4.95 oz of refrigerant from the system

Example 2: System has 45 ft of existing 5/16" liquid line. What is the charge adjustment?

Formula: (.40 oz/ft. x 45ft) - (9 oz.) = 9 oz.

Net result is to add 9 oz of refrigerant to the system

NOTE: Conditions must be favorable for charging by subcooling method. Indoor temperature must be 70°F to 80°F (21.1°C to 26.7°C), and outdoor temperature must be 70°F to 100°F (21.1°C to 37.8°C). If outside these conditions, adjust charge for long line sets by weigh-in method.

LONG LINE APPLICATIONS

An application is considered Long Line, when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. See Accessory Usage Guideline table for required accessories. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Air Conditioner systems, the chart below shows when an application is considered Long Line.

For Air Conditioner systems, the chart below shows when an application is considered Long Line.

AC with Puron® Refrigerant Long Line Description ft (m) Beyond these lengths, a TXV is required

Total Length	Outdoor Unit Above or Below Indoor Unit
TXV required beyond 50 ft. (15.2 m)	TXV required beyond 20 ft. (6.1 m)

AC with Puron® Refrigerant Long Line Description ft (m) (Beyond these lengths, long line accessories are required)

Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
1/4 + TXV	No accessories needed within allowed lengths	No accessories needed within allowed lengths	175 (53.3)
5/16 + TXV	120 (36.6)	50 (15.2) vertical or 120 (36.6) total	120 (36.6)
3/8 + TXV	80 (24.4)	35 (10.7) vertical or 80 (24.4) total	80 (24.4)

Note: See Residential Piping and Long Line Guideline for details

VAPOR LINE SIZING AND COOLING CAPACITY LOSS

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for AC systems with Puron refrigerant:

Vapor Line Sizing and Cooling Capacity Losses — Puron® Refrigerant 2-Stage Air Conditioner Applications

Unit Nominal Size (Btuh)	Maximum Liquid Line Diameters (In. OD)	Vapor Line Diameters (In.) OD	Cooling Capacity Loss (%) Total Equivalent Line Length ft. (m)								
			26–50 (7.9–15.2)	51–80 (15.5–24.4)	81–100 (24.7–30.5)	101–125 (30.8–38.1)	126–150 (38.4–45.7)	151–175 (46.0–50.3)	176–200 (53.6–60.0)	201–225 (61.3–68.6)	226–250 (68.9–76.2)
024	3/8	5/8	0	1	1	2	3	3	4	4	5
		3/4	0	0	0	0	1	1	1	1	1
036	3/8	5/8	1	2	4	5	6	7	9	10	11
		3/4	0	0	1	1	2	2	3	3	4
		7/8	0	0	0	0	1	1	1	1	2
048	3/8	3/4	1	2	2	3	4	5	6	7	7
		7/8	0	1	1	2	2	2	3	3	3
		1–1/8	0	0	—	—	—	—	—	—	—
060	3/8	3/4	1	2	4	5	6	7	9	10	11
		7/8	0	1	2	2	3	4	4	5	5
		1–1/8	0	0	0	1	1	1	1	1	1

Applications in this area may be long line and may have height restrictions. See the *Residential Piping and Long Line Guideline*.

— Applications in this area are not recommended due to insufficient oil return

PHYSICAL DATA

UNIT SIZE SERIES	024–B	036–B	048–B	060–C
Compressor Type	Ultratech 2–Stage Scroll			
REFRIGERANT	Puron® (R–410A)			
Control	TXV (Puron Hard Shutoff)			
Charge lb (kg)	6.64 (3.01)	9.26 (4.20)	12.94 (5.87)	12.70 (5.76)
COND FAN	Propeller Type, Direct Drive			
Air Discharge	Vertical			
Air Qty (CFM)	2481	3068	4700	4700
Motor HP	1/12	1/10	1/4	1/4
Motor RPM	800	825	825	825
COND COIL				
Face Area (Sq ft)	19.38	19.38	25.12	25.12
Fins per In.	25	20	20	20
Rows	1	2	2	2
Circuits	5	7	7	7
VALVE CONNECT. (In. ID)				
Vapor	3/4	7/8	7/8	7/8
Liquid	3/8			
REFRIGERANT TUBES (In. OD)				
Rated Vapor*	3/4	7/8	1–1/8	1–1/8
Liquid	3/8			

*Units are rated with 25 ft (7.6 m) of lineset length. See *Vapor Line Sizing and Cooling Capacity Loss* table when using other sizes and lengths of lineset.

ELECTRICAL DATA

UNIT SIZE – SERIES	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE† or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
024–B	208–230/1	253	197	58.3	11.1	0.6	14.5	20
036–B				83.0	15.3	0.7	19.8	35
048–B				104.0	21.2	1.3	27.8	40
060–C				152.9	28.8	1.3	37.3	60

* Permissible limits of the voltage range at which the unit will operate satisfactorily

† Time—Delay fuse.

FLA — Full Load Amps

LRA — Locked Rotor Amps

MCA — Minimum Circuit Amps

RLA — Rated Load Amps

NOTE: Control circuit is 24–V on all units and requires external power source. Copper wire must be used from service disconnect to unit.

All motors/compressors contain internal overload protection.

Complies with 2010 requirements of ASHRAE Standards 90.1

A-WEIGHTED SOUND POWER LEVEL

UNIT SIZE – VOLTAGE, SERIES	STANDARD RATING (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA, without tone adjustment)					
		125	250	500	1000	4000	8000
024–B	73 – High Stage	49.0	58.0	66.5	69.5	61.0	57.5
	74 – Low Stage	52.0	59.5	67.0	69.5	61.0	55.0
036–B	74 – High Stage	53.5	61.5	68.0	71.0	62.5	57.5
	73 – Low Stage	54.0	61.5	67.5	68.0	63.0	56.0
048–B	74 – High Stage	54.5	59.5	67.0	68.0	60.0	53.5
	72 – Low Stage	55.5	61.5	67.0	66.0	60.5	55.0
060–C	75 – low stage	71.0	70.0	69.0	70.0	63.0	60.0
	74 – high stage	69.0	68.0	69.0	71.0	61.0	59.0

NOTE: Tested in accordance with AHRI Standard 270–95. (Not listed with AHRI).

CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

UNIT SIZE – VOLTAGE, SERIES	REQUIRED SUBCOOLING °F (°C)
024–B	10 (5.6)
036–B	14 (7.8)
048–B	13 (7.2)
060–C	14 (7.8)

THERMOSTATS

PART NUMBER	PROGRAM	GAS	ELECTRIC	HEAT	COOL
T6–PAC01	7–Day	✓	✓	1	1
T6–NAC01	NP	✓	✓	1	1

THERMOSTAT ACCESSORIES		
PART NUMBER	BRIEF DESCRIPTION	THERMOSTATS USED WITH
SYSTXBRRS01	Indoor Remote Room Temperature Sensor	All T6– thermostats
T6–EXP01–A	ExP® Computer Programming Accessory	T6–P thermostats
TSTATXXCNV10‡	Thermostat Conversion Kit (4 to 5 wire) – 10 pack	All Bryant® branded thermostats
TX–LBP01	Large Decorative Backplate	T6–Pxx, T6–Nxx, and T2–Pxx
TSTATXXSEN01–B	Outdoor Air Temperature Sensor	All T6– thermostats

‡ Available through RCD

ACCESSORIES

ORDER NUMBER	DESCRIPTION	024-B	036-B	048-B	060-C
KAACH1701AAA	CRKC HTR KIT	X	X	S	S
KAALS0201LLS	SOL VALVE KIT	X	X	X	X
KAAWS0101AAA	WINTER ST KIT	X	X	X	X
KSAFT0101AAA	FRZ THERM KIT	X	X	X	X
KSAHS2501AAA	HARD START KIT	X	X		
KSAHS2801AAA	HARD START KIT			X	X
KSALA0301410	LOW AMBIENT KIT	X	X	X	X
KSASF0101AAA	SPRT FEET KIT	X	X	X	X
KSASH2301COP	SOUND BLKT KIT	X	X		
KSASH2401COP	SOUND BLKT KIT			X	X

X = Accessory S= Standard

* Not backward compatible to previous series.

ACCESSORY USAGE GUIDELINE

Accessory	Required for Low Ambient Cooling Applications (Below 55° F / 12.8° C)	Required for Long Line Applications*	Required for Sea Coast Applications (within 2 miles/3.2 km)
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Crankcase Heater	Yes (standard on some units)	Yes (standard on some units)	No
Evaporator Freeze Thermostat	Yes	No	No
Hard Shutoff TXV	Yes (standard w/factory approved indoor unit)	Yes (standard w/factory approved indoor unit)	Yes (standard w/factory approved indoor unit)
Liquid Line Solenoid Valve	No	See Residential Piping and Long Line Guideline	No
Low-Ambient Pressure Switch	Yes	No	No
Support Feet	Recommended	No	Recommended
Winter Start Control	Yes	No	No

* For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 35 ft. (10.7 m) vertical differential, refer to Residential Piping and Longline Guideline.

Accessory Description and Usage (Listed Alphabetically)

1. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a "hard" boost to compressor motor at each start up.

Usage Guideline:

Required for 2-stage non-communicating units in the following applications:

- Long line
- Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

2. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in low ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

3. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

4. Low-Ambient Pressure Switch

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits. The control will maintain working head pressure at low-ambient temperatures down to 0°F (-17.8°C) when properly installed.

Usage Guideline:

A Low-Ambient Pressure Switch must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

5. Support Feet

Four stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

Coastal installations.

Windy areas or where debris is normally circulating.

Rooftop installations.

For improved sound ratings.

6. Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

NOTE: When using a hard shut off TXV with single phase reciprocating compressors, a Compressor Start Assist Capacitor and Relay is required.

Usage Guideline:

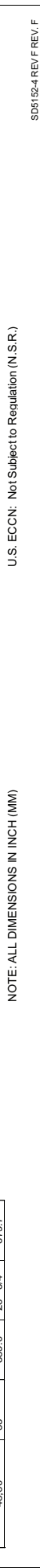
Required to achieve AHRI ratings in certain equipment combinations. Refer to combination ratings.

Hard shut off TXV or LLS required in air conditioner long line applications.

7. Winter Start Control

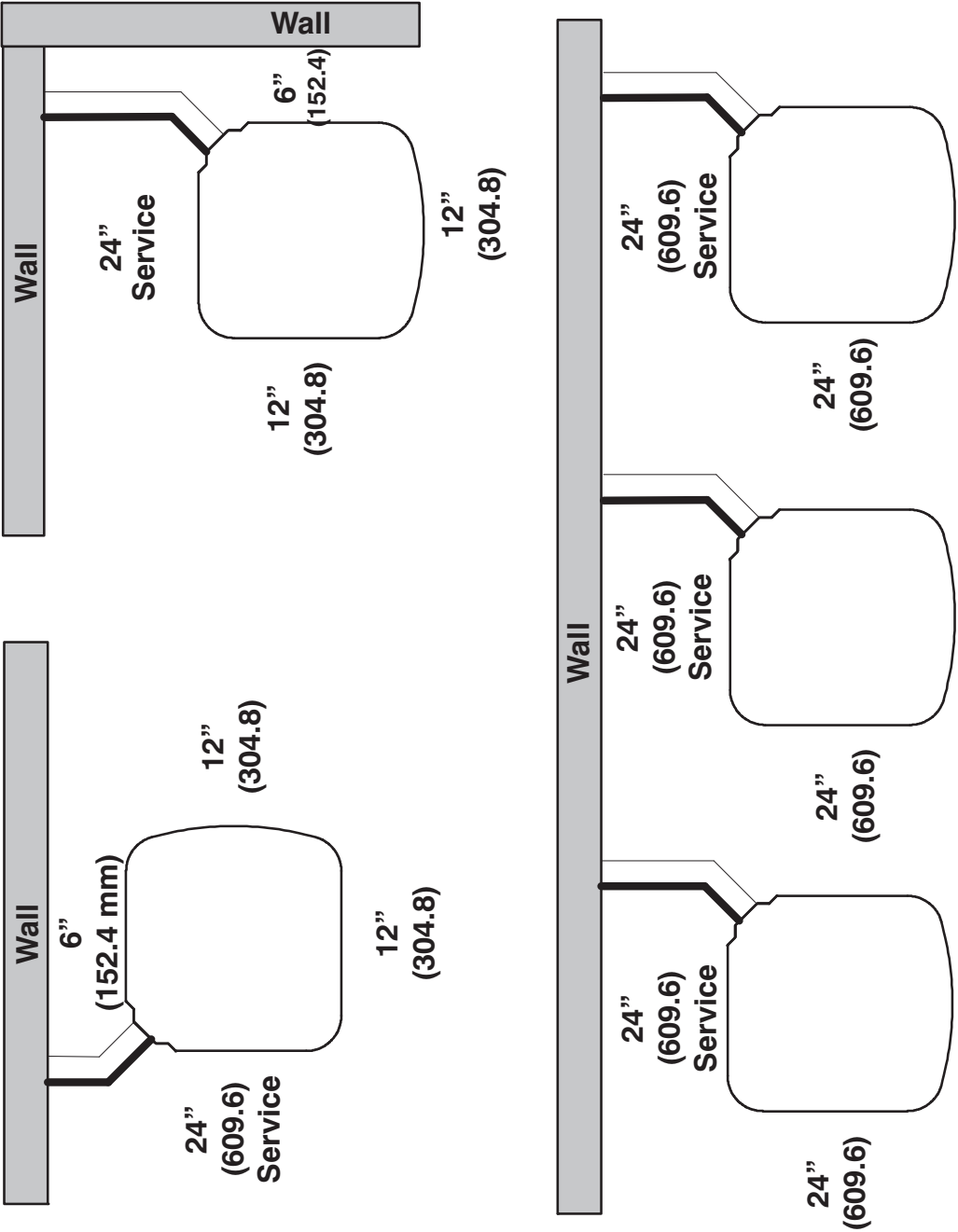
This control is designed to alleviate nuisance opening of the low-pressure switch by bypassing it for the first 3 minutes of operation.

UNIT	SERIES	ELECTRICAL CHARACTERISTICS			A			B			C			D			E			F			G			H			I			J			K			OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT	
		INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	INCH	MM	INCH	MM	Lbs	Kgs	INCH	MM	INCH	MM		
127NAN02A0400DBAA	B	Y	N	N	N	31	316	792.5	35	1/2	901.4	3/4	19.1	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	16	408.4	15	1/2	393.7	16	1/8	409.6	183	83.0	222	100.7	33	5/16	846.6	40	1015.8		
127NAN03A0800DBAA	B	Y	N	N	N	31	316	792.5	35	1/2	901.4	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	15	3/4	400.1	15	1/2	393.7	15	381.0	216	98.0	285	115.7	33	5/16	846.6	40	1015.8		
127NAN04A0800DBAA	B	Y	N	N	N	35	889.0	38	7/8	987.8	7/8	22.2	6	9/16	166.1	28	7/16	722.8	9	1/8	231.3	5/16	7.9	3	76.2	18	1/2	469.9	16	1/2	419.1	17	431.8	277	125.6	318	144.2	37	1/8	943.1	43	318			
127NAN06A0800DBAA	C	Y	N	N	N	35	889.0	38	7/8	987.8	7/8	22.2	6	9/16	166.1	28	7/16	722.8	9	1/8	231.3	5/16	7.9	3	76.2	17	3/4	450.9	16	1/2	419.1	17	431.8	281	127.5	323	146.5	37	1/8	943.1	43	318			
127NAN08A0800DBAA	C	Y	N	N	N	35	889.0	38	7/8	987.8	7/8	22.2	6	9/16	166.1	28	7/16	722.8	9	1/8	231.3	5/16	7.9	3	76.2	18	1/2	469.9	16	1/2	419.1	17	431.8	281	127.5	323	146.5	37	1/8	943.1	43	318			



CLEARANCES

Clearances (various examples)



Note: Numbers in () = mm

IMPORTANT: When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

TESTED AHRI COMBINATION RATINGS

NOTE: Ratings contained in this document are subject to change at any time.

For AHRI ratings certificates, please refer to the AHRI directory www.ahridirectory.org

Additional ratings and system combinations can be accessed via the Bryant database at: www.MyBryantRatings.com

For performance data at specific application &/or design conditions with various indoor unit combinations, the equipment performance calculator can be accessed at : <http://rpmob.wrightsoft.com/>

Model Number	Indoor Model	AHRI STANDARD RATINGS – COOLING					
		Capacity		EER	SEER	ID SCFM	
		High	Low			High	Low
127ANA024****B	CNPV*3117AL*	25000	21200	12.2	14.0	800	680
127ANA036****B	CAP**3721AL*	36800	30200	12.2	14.0	1050	840
127ANA048****B	CAP**6124AL*	49000	40500	12.5	15.0	1400	1120
127ANA060B***C	CAP**6124AL*	56500	44500	14.5	12.0	1625	1300

AHRI —Air Conditioning, Heating & Refrigeration Institute

EER —Energy Efficiency Ratio – 80°F (26.6°C) indoor db/67°F (19.4°C) indoor wb & 95°F (35°C) outdoor wb.

SEER —Seasonal Energy Efficiency Ratio

TDR —Time–Delay Relay. In most cases, only 1 method should be used to achieve TDR function. Using more than 1 method in a system may cause degradation in performance. Use either the accessory Time–Delay Relay KAATD0101TDR or a furnace equipped with TDR. Most Bryant furnaces are equipped with TDR.

NOTES:

1. Ratings are net values reflecting the effects of circulating fan motor heat. Supplemental electric heat is not included.
2. Tested outdoor/indoor combinations have been tested in accordance with DOE test procedures for central air conditioners. Ratings for other combinations are determined under DOE computer simulation procedures.
3. Determine actual CFM values obtainable for your system by referring to fan performance data in fan coil or furnace coil literature.
4. Do not apply with capillary tube coils as performance and reliability are affected.

GUIDE SPECIFICATIONS

GENERAL

System Description

Outdoor-mounted, air-cooled, split-system air conditioner unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, propeller-type condenser fan, and a control box. Unit will discharge supply air upward as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or coil unit.

Quality Assurance

- Unit will be rated in accordance with the latest edition of AHRI Standard 210.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ANSI/ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have c-UL approval.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils will be leak tested and pressure tested.
- Unit constructed in ISO9001 approved facility.

Delivery, Storage, and Handling

- Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

Warranty (for inclusion by specifying engineer)

- U.S. and Canada only.

PRODUCTS

Equipment

- Factory assembled, single piece, air-cooled air conditioner unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge Puron® (R-410A), and special features required prior to field start-up.

Unit Cabinet

- Unit cabinet, including louvered coil guard, will be constructed of galvanized steel, bonderized, and coated with a powder coat paint.

Fans

- Condenser fan will be direct-drive propeller type, discharging air upward.

AIR-COOLED, SPLIT-SYSTEM AIR CONDITIONER

127A

2 TO 5 NOMINAL TONS

- Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated bearings. Shafts will be corrosion resistant.
- Fan blades will be statically and dynamically balanced.
- Condenser fan openings will be equipped with coated steel wire safety guards.

Compressor

- Compressor will be hermetically sealed.
- Compressor will be mounted on rubber vibration isolators.

Condenser Coil

- Condenser coil will be air cooled.
- Coil will be constructed of aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed.

Refrigeration Components

- Refrigeration circuit components will include liquid-line shutoff valve with sweat connections, vapor-line shutoff valve with sweat connections, system charge of Puron® (R-410A) refrigerant, and compressor oil.
- Unit will be equipped with high-pressure switch, low pressure switch and filter drier for Puron refrigerant.

Operating Characteristics

- The capacity of the unit will meet or exceed _____ Btuh at a suction temperature of _____ °F/°C. The power consumption at full load will not exceed _____ kW.
- Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of _____ Btuh or greater at conditions of _____ CFM entering air temperature at the evaporator at _____ °F/°C wet bulb and _____ °F/°C dry bulb, and air entering the unit at _____ °F/°C.
- The system will have a SEER of _____ Btuh/watt or greater at DOE conditions.

Electrical Requirements

- Nominal unit electrical characteristics will be _____ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- Unit electrical power will be single point connection.
- Control circuit will be 24v.

Special Features

- Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.

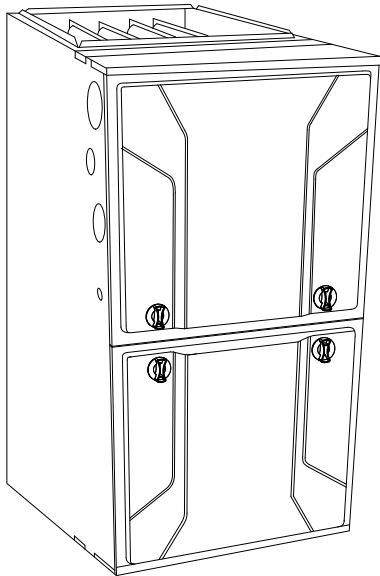
SYSTEM DESIGN SUMMARY

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. The maximum outdoor operating ambient in cooling mode is 125°F (51.67°C) when operating voltage is 230v. For 208v applications, the maximum outdoor ambient is 120°F (48.9°C).
4. Minimum outdoor operating air temperature for heating mode is -20°F (-28.9°C).
5. Maximum outdoor operating air temperature for heating mode is 66°F (18.9°C).
6. For reliable operation, unit should be level in all horizontal planes.
7. For interconnecting refrigerant tube lengths greater than 80 ft (23.4 m) and/or elevation differences between indoor and outdoor units greater than 20 ft (6.1 m), consult Residential Piping and Longline Guideline and Service Manual available from equipment distributor.
8. If any refrigerant tubing is buried, provide a 6 in. (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. (914.4 mm) may be buried without further consideration. Do not bury refrigerant lines longer than 36 in. (914.4 mm).
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
10. Do not apply capillary tube indoor coils to these units.
11. Factory-supplied filter drier must be installed.

**926TA
PREFERRED™ TWO-STAGE
4-WAY MULTIPOISE, VARIABLE SPEED
CONDENSING GAS FURNACE**



Product Data



A11264

The 926TA Multipoise Variable-Speed Condensing Gas Furnace features the two-stage Preferred™ Series System. The Perfect Heat® technology two-stage gas valve is at the heart of the comfort provided by this furnace, along with the variable-speed ECM blower motor, and two-speed inducer motor. With an Annual Fuel Utilization Efficiency (AFUE) up to 96.5%, the Preferred™ Series two-stage gas furnace provides exceptional savings as well when compared to standard gas furnaces. This Preferred™ Series Gas Furnace also features 4-way multipoise installation flexibility, and is available in eight model sizes. The 926TA can be vented for direct vent/two-pipe, ventilated combustion air, or single-pipe applications. Low NOx units are designed for California installations and meet 40 ng/J NOx emissions. Can be installed in air quality management districts with a 40 ng/J NOx emissions requirement. All sizes are design certified in Canada. This furnace is not designed for use in recreation vehicles, manufactured (mobile) homes or outdoors.

STANDARD FEATURES

- All sizes meet ENERGY STAR® Version 4.1 criteria for gas furnaces: 95+AFUE
- Quiet operation. Compare for yourself at HVACpartners.com.
- Series 3 or greater (sizes 60080, 60100, 66120) allow 15 Amp breaker with accessory (order separately).
- Ideal height 35" (889 mm) cabinet: short enough for taller coils, but still allows enough room for service.
- Silicon Nitride Perfect Light™ Hot Surface Igniter.
- FanOn Plus™ technology allows control of continuous fan speed from a compatible thermostat.
- 4-way multipoise design for upflow, downflow or horizontal installations, with unique vent elbow and optional through-the-cabinet downflow venting capability.
- Full-featured variable-speed blower motor, two-speed inducer motor, and two-stage gas valve.
- Self-diagnostics.
- Adjustable blower speed for cooling, continuous fan, and dehumidification.
- Aluminized-steel primary heat exchanger.
- Stainless-steel condensing secondary heat exchanger.
- Propane convertible (See Accessory list).
- Factory-configured ready for upflow applications.
- Fully-insulated casing including blower section.
- Convenient Air Purifier and Humidifier connections.
- Direct-vent/sealed combustion, single-pipe venting or ventilated combustion air.
- Installation flexibility: sidewall or vertical vent.
- Residential installations may be eligible for consumer financing through the Retail Credit Program.
- Cabinet air leakage less than 2.0% at 1.0 in. W.C. and cabinet air leakage less than 1.4% at 0.5 in. W.C. when tested in accordance with ASHRAE standard 193.

**Preferred
SERIES**



Use of the AHRI Certified™ Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



**Always Ask For
FACTORY
AUTHORIZED
PARTS**

SAP ORDERING NO.	CASING DIMENSIONS (IN.)			RATED HEATING OUTPUT† (BTUH)		AFUE		ENERGY STAR®	HEATING AIRFLOW			COOLING CFM @ 0.5 ESP (in. W.C.)	MOTOR HP - SPEED (VARIABLE SPEED)
	H	D	W	High	Low	UPFLOW/HORIZONTAL	DOWN-FLOW		CFM‡ (High Heating)	CFM (Low Heating)	High Heating ESP (in. W.C.)		
926TA30040V14	35	29.5	14.2	39,000	25,000	96.5%	95.0%	YES	815	660	0.10	905	1/2
926TA36040V17	35	29.5	17.5	39,000	25,000	96.0%	95.0%	NO	860	660	0.10	1065	1/2
926TA36060V14	35	29.5	14.2	58,000	38,000	95.0%	95.0%	YES	1120	910	0.12	1065	1/2
926TA42060V17	35	29.5	17.5	58,000	38,000	96.3%	95.0%	YES	1135	860	0.12	1475	3/4
926TA48080V17	35	29.5	17.5	78,000	50,000	96.2%	95.0%	YES	1505	1160	0.15	1610	3/4
926TA60080V21	35	29.5	21.0	78,000	51,000	96.5%	95.0%	YES	1555	1200	0.15	2005	1
926TA60100V21	35	29.5	21.0	97,000	63,000	96.1%	95.0%	YES	1865	1435	0.20	2005	1
926TA66120V24	35	29.5	24.0	117,000	76,000	96.5%	95.0%	YES	2375	1675	0.20	2115	1

†Capacity in accordance with DOE test procedures. Ratings are position dependent. See rating plate.

‡Minimum heat CFM when low-heat rise adjustment switch (SW 1–3) and comfort/efficiency adjustment switch (SW1–4) on control center are OFF.
ESP – External Static Pressure

FEATURES AND BENEFITS

SmartEvap™ Technology — When paired with a compatible thermostat, this dehumidification feature overrides the cooling blower off-delay when there is a call for dehumidification. By deactivating the blower off-delay, SmartEvap technology prevents condensate that remains on the coil after a dehumidification cycle from re-humidifying throughout the home. This results in reduced humidity and a more comfortable indoor environment for the homeowner.

Unlike competitive systems, SmartEvap technology only overrides the cooling blower off delay when humidity control is needed. Once humidity is back in control, SmartEvap re-enables the energy-saving cooling blower off-delay.

Fan On Plus™ Technology — Sometimes the constant fan setting on a standard furnace system can actually reduce homeowner comfort by providing too much or too little air! Fan On Plus technology improves comfort all year long by allowing the homeowner to select the continuous fan speed of their choice using a compatible thermostat.

HYBRID HEAT® Dual Fuel system — This system can provide more control over your monthly energy bills by automatically selecting the most economical method of heating. With HYBRID HEAT, our system automatically switches between the gas furnace and the electric heat pump as outside temperatures change to maintain greater efficiency and comfort than with any traditional single-source heating system. The heat pump also delivers high-efficiency cooling in the summer.

Power Heat™ Igniter — Bryant's unique SiN igniter is not only physically robust but it is also electrically robust. It is capable of running at line voltage and does not require complex voltage regulators as do other brands. This unique feature further enhances the gas furnace reliability and continues Bryant's tradition of technology leadership and innovation in providing a reliable and durable product.

Full-Featured, Variable Speed Motors — Our variable-speed ECM (Electronically Commutated Motor) optimizes comfort levels in the home year round; features such as passive/active dehumidification, ramping profiles, and quiet operation. They can provide cooling match enhancements to increase the effective SEER of select Bryant air conditioner or heat pump system. This motor does not report back RPM and static pressure to the furnace control.

Reliable Heat Exchanger Design — The aluminized steel, clam shell primary heat exchanger was re-engineered to achieve greater efficiency out of a smaller size. The first two passes of the heat exchanger are based on the current 80% product, a design with more than ten years of field-proven performance and success.

These innovations, paired with the continuation of a crimped, no-weld seam create an efficient, robust design for this essential component.

The condensing heat exchanger, a stainless steel fin and tube design, is positioned in the furnace to extract additional heat. Stainless steel coupling box componentry between heat exchangers has exceptional corrosion resistance in both natural gas and propane applications.

Optional Media Filter Cabinet — Enhanced indoor air quality in the home is made easier with our media filter cabinet. When installed as a part of the system, this cabinet allows for easy and convenient addition of a Bryant high efficiency air filter.

4-Way Multipoise Design — One model for all applications — there is no need to stock special downflow or horizontal models when one unit will do it all. The new heat exchanger design allows these units to achieve the certified AFUE in all positions.

Direct or Single-pipe Venting, or Optional Ventilated Combustion Air — This furnace can be installed as a 2-pipe (Direct Vent) furnace, in an optional ventilated combustion air application, or in single-pipe, non-direct vent applications. This provides added flexibility to meet diverse installation needs.

Sealed Combustion System — This furnace brings in combustion air from outside the furnace, which results in especially quiet operation. By sealing the entire combustion vestibule, the entire furnace can be made quieter, not just the burners.

Insulated Casing — Foil-faced insulation in heat exchanger section of the casing minimizes heat loss. The acoustical insulation in the blower compartment reduces air and motor noise for quiet operation.

Monoport Burners — The burners are specially designed and finely tuned for smooth, quiet combustion and economical operation.

Bottom Closure — Factory-installed for side return; easily removable for bottom return. The multi-use bottom closure can also serve for roll-out protection in horizontal applications, and act as the bottom closure for the optional return air base accessory.

Certifications — This furnace is CSA (AGA and CGA) design certified for use with natural and propane gases. The furnace is factory-shipped for use with natural gas. A CSA listed gas conversion kit is required to convert furnace for use with propane gas. The efficiency is AHRI efficiency rating certified. This furnace meets California Air Quality Management District emission requirements.

MODEL NUMBER NOMENCLATURE

Example of a Model Number

1 - 2 Family/Tier 92	3 Base Eff. 6	4 Htg. Stages T	5 Major Series A	6 - 7 Clg. Cap. 30	8 - 10 Htg. Cap. 040	11 Motor V	12 - 13 Width 14	14 Voltage A	15 Features --	16 Minor Series A
91 - Legacy 92 - Preferred 98 - Evolution	0 - +90 AFUE 2 - +92 AFUE 3 - +93 AFUE 5 - +95 AFUE 6 - +96 AFUE 7 - +97 AFUE	S - Single Stage T - Two Stage M - Modulating		24 - 800 CFM 30 - 1000 CFM 36 - 1200 CFM 42 - 1400 CFM 48 - 1600 CFM 54 - 1800 CFM 60 - 2000 CFM 66 - 2200 CFM (@ 0.5" ESP)	040 = 40,000 BTU 060 = 60,000 BTU 080 = 80,000 BTU 100 = 100,000 BTU 120 = 120,000 BTU 140 = 140,000 BTU	S - Standard E - Energy Efficient V - Variable Speed	14 - 14.2" 17 - 17.5" 21 - 21.0" 24 - 24.5"	Voltage	L - Low NOx	

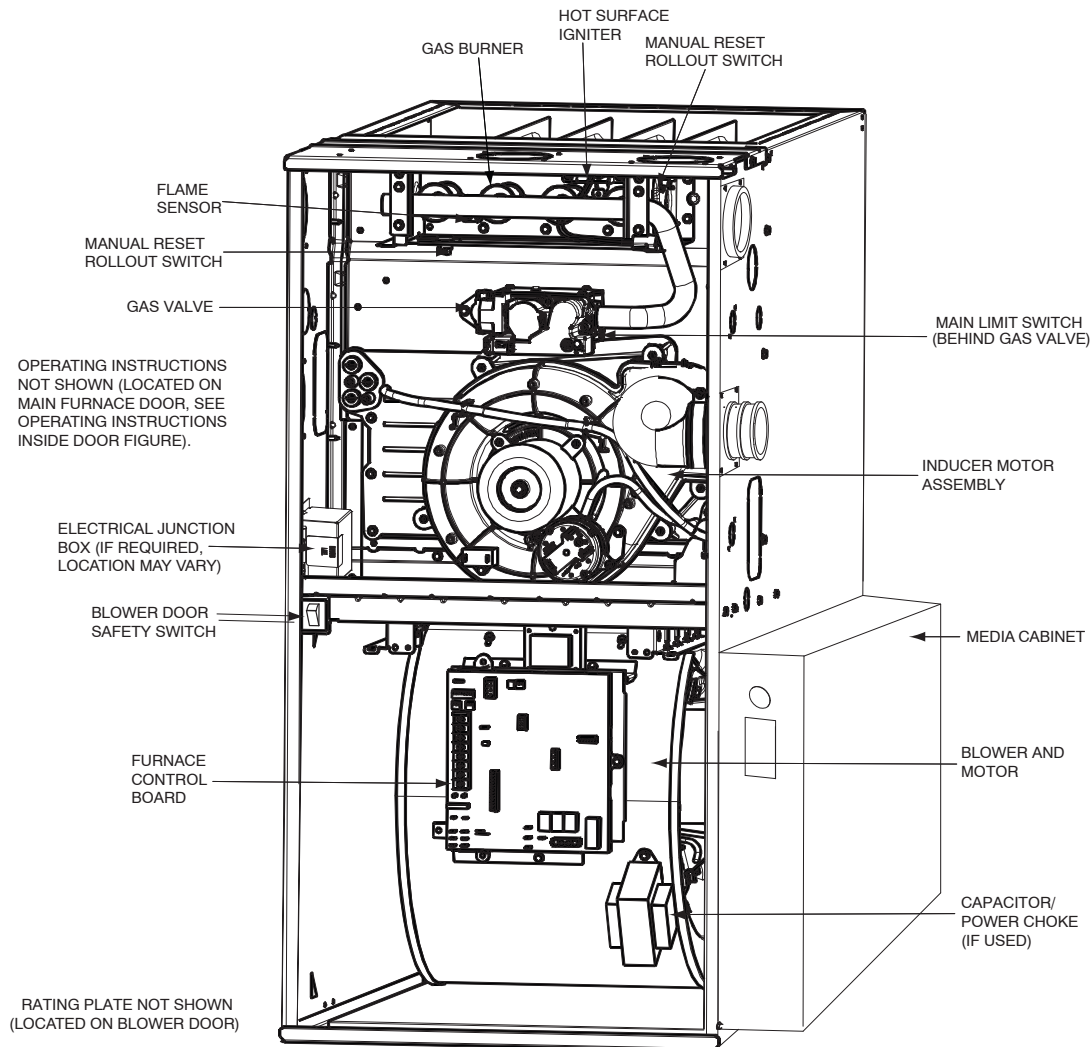
Not all families have these models.

A14367

For California Residents:

For installation in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 14 ng/J NOx emission limit, and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com

FURNACE COMPONENTS



REPRESENTATIVE DRAWING ONLY, SOME MODELS MAY VARY IN APPEARANCE.

A170154

SPECIFICATIONS

The furnace should be sized to provide 100 percent of the design heating load requirement plus any margin that occurs because of furnace model size capacity increments. None of the furnace model sizes can be used if the heating load is 20,000 BTU or lower. Use Air Conditioning Contractors of America (Manual J and S); American Society of Heating, Refrigerating, and Air-Conditioning Engineers; or other approved engineering

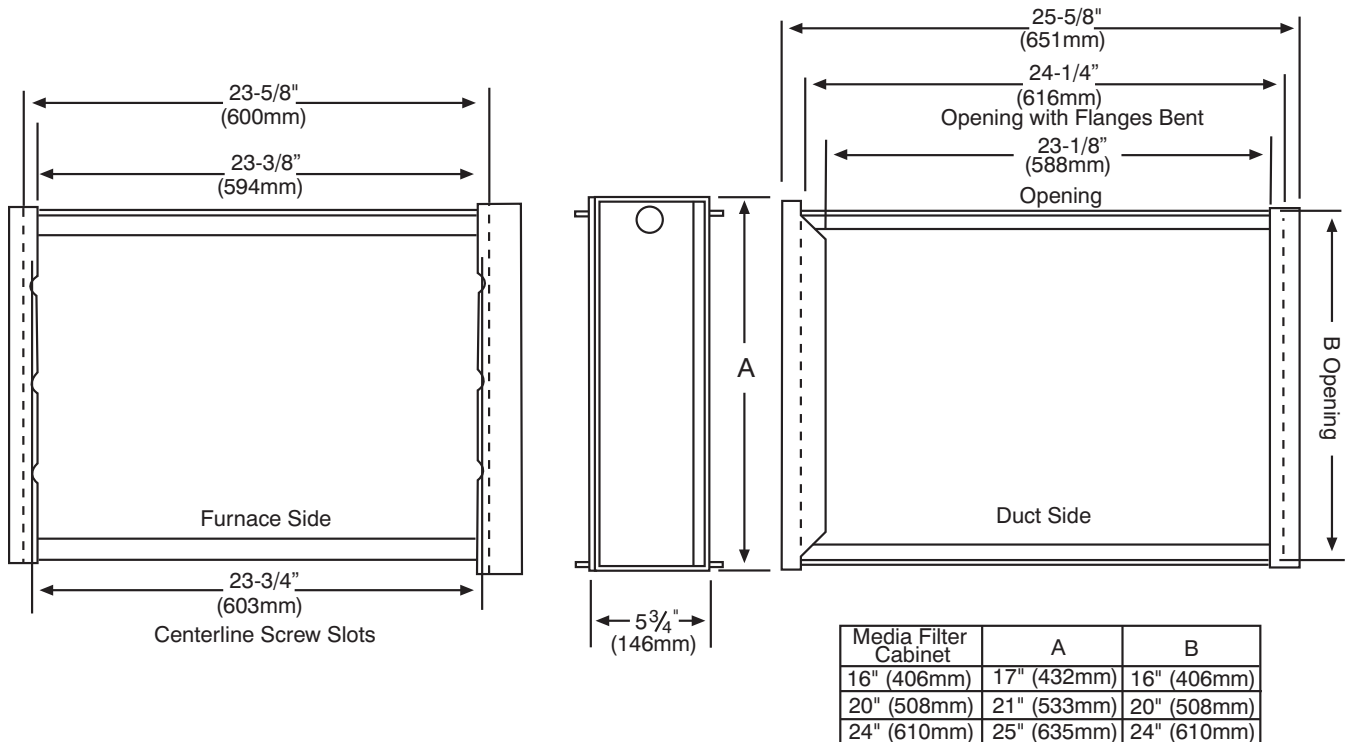
method to calculate heating load estimates and select the furnace. Excessive oversizing of the furnace may cause the furnace and/or vent to fail prematurely, customer discomfort and/or vent freezing. Failure to follow these guidelines is considered faulty installation and/or misapplication of the furnace; and resulting failure, damage, or repairs may impact warranty coverage.

Heating Capacity and Efficiency			30040	36040	36060	42060	48080	60080	60100	66120
Input	High Heat	(BTUH)	40,000	40,000	60,000	60,000	80,000	80,000	100,000	120,000
	Low Heat	(BTUH)	26,000	26,000	39,000	39,000	52,000	52,000	65,000	78,000
Output	High Heat	(BTUH)	39,000	39,000	58,000	58,000	78,000	78,000	97,000	117,000
	Low Heat	(BTUH)	25,000	25,000	38,000	38,000	50,000	51,000	63,000	76,000
Certified Temperature Rise Range °F (°C)		High Heat	40 - 70 (22 - 39)	40 - 70 (22 - 39)	40 - 70 (22 - 39)	40 - 70 (22 - 39)	40 - 70 (22 - 39)	40 - 70 (22 - 39)	40 - 70 (22 - 39)	40 - 70 (22 - 39)
		Low Heat	30 - 60 (17 - 33)	30 - 60 (17 - 33)	30 - 60 (17 - 33)	30 - 60 (17 - 33)	30 - 60 (17 - 33)	30 - 60 (17 - 33)	30 - 60 (17 - 33)	30 - 60 (17 - 33)
Airflow Capacity and Blower Data			30040	36040	36060	42060	48080	60080	60100	66120
Rated External Static Pressure (in. w.c.)	Heating		0.10	0.10	0.12	0.12	0.15	0.15	0.20	0.20
	Cooling		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Airflow Delivery @ Rated ESP (CFM)	High Heat		815	860	1120	1135	1505	1555	1865	2375
	Low Heat		660	660	910	860	1160	1200	1435	1675
	Cooling		905	1065	1065	1475	1610	2005	2005	2115
Cooling Capacity (tons) @ 400, 350 CFM/ton	400 CFM/ton		2	2.5	2.5	3.5	4	5	5	5
	350 CFM/ton		2.5	3	3	4	4.5	5.5	5.5	6
Direct-Drive Motor Type			Electronically Communicated Motor (ECM)							
Direct-Drive Motor HP			1/2	1/2	1/2	3/4	3/4	1	1	1
Motor Full Load Amps—Default / Low Amp Kit†			6.8	6.8	6.8	10.1	10.1	13.9/10.4	13.9/10.4	13.9/10.4
RPM Range			600 - 1200							
Speed Selections			Variable (PWM)							
Blower Wheel Dia x Width	in.		11 x 7	11 x 8	11 x 7	11 x 8	11 x 8	11 x 10	11 x 10	11 x 11
Air Filtration System			Optional Media Cabinet Field Supplied Filter							
Filter Used for Certified Watt Data			KGAWF1506UFR							
Electrical Data			30040	36040	36060	42060	48080	60080†	60100†	66120†
Input Voltage		Volts-Hertz-Phase	115-60-1							
Operating Voltage Range		Min-Max	104-127							
Maximum Input Amps—Default / Low Amp Kit†		Amps	7.5	7.5	7.6	10.9	10.9	14.7/11.3	14.7/11.3	14.7/11.3
Unit Ampacity—Default / Low Amp Kit†		Amps	10.3	10.2	10.3	14.5	14.5	19.3/14.9	19.4/15.0	19.4/15.0
Minimum Wire Size—Default / Low Amp Kit†		AWG	14	14	14	14	14	12/14	12/14	12/14
Maximum Wire Length @ Minimum Wire Size—Default / Low Amp Kit†		Feet (M)	36 (11.0)	36 (11.0)	36 (11.0)	25 (7.6)	25 (7.6)	29/24 (8.8/7.3)	29/24 (8.8/7.3)	29/24 (8.8/7.3)
Maximum Fuse/Ckt Bkr (Time-Delay Type Recommended)—Default / Low Amp Kit†		Amps	15	15	15	15	15	20/15	20/15	20/15
Transformer Capacity (24vac output)			VA							
External Control Power Available	Heating		.3 VA							
	Cooling		.6 VA							
Controls			30040	36040	36060	42060	48080	60080	60100	66120
Gas Connection Size			1/2" - NPT							
Burners (Monoport)			2	2	3	3	4	4	5	6
Gas Valve (Redundant)		Manufacturer	White Rodgers							
		Minimum Inlet Gas pressure (in. wc)	4.5							
		Maximum Inlet Gas pressure (in. wc)	13.6							
Manufactured (Mobile) Home Kit			not approved for MH use							
Ignition Device			Silicon Nitride							
Limit Control			165	180	165	180	170	200	180	160
Heating Blower Control (Heating Off-Delay)			Adjustable: 90, 120, 150, 180 seconds							
Cooling Blower Control (Time Delay Relay)			90 seconds							
Communication System			None							
Thermostat Connections			R, W/W1, W2 Y/Y2, Y1, G, Com 24V, DHUM							
Accessory Connections			EAC (115vac); HUM (24vac); 1-stg. AC (via Y/Y2)							

* See Accessory List for part numbers available.

† Low Amp Kit (KGAPC0101ECM) allows select furnaces to be installed with a 15 Amp Breaker and 14 AWG wire within the listed wire length.

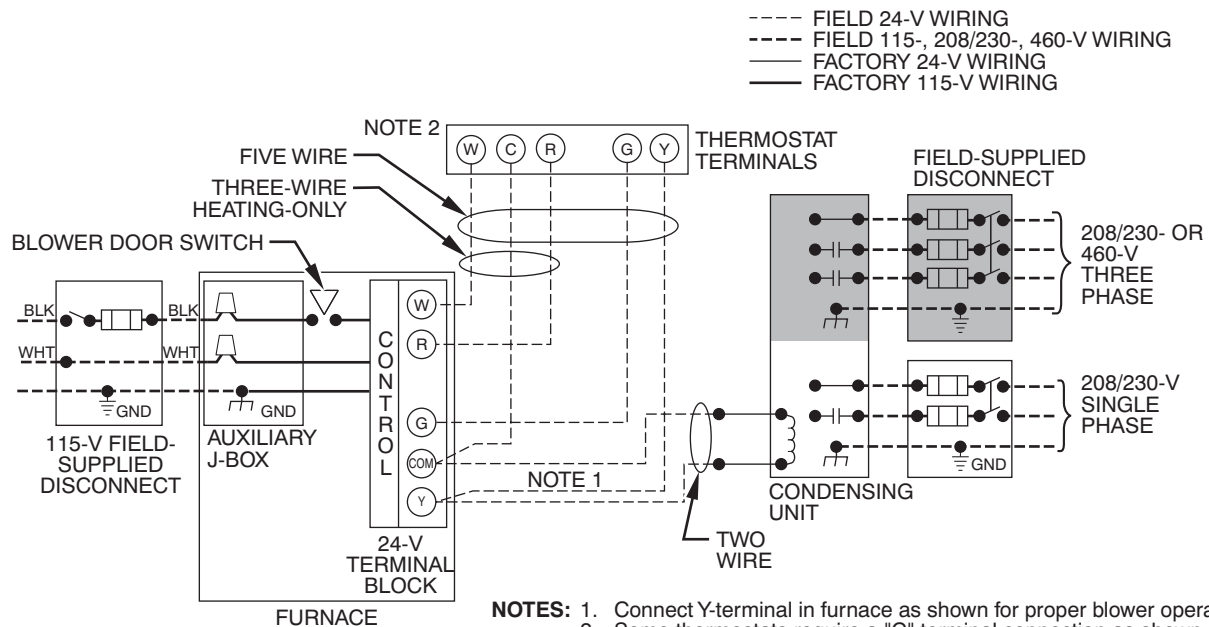
OPTIONAL MEDIA FILTER CABINET



NOTE: Media cabinet is matched to the bottom opening on furnace. May also be used for side return.

A12428

TYPICAL WIRING SCHEMATIC



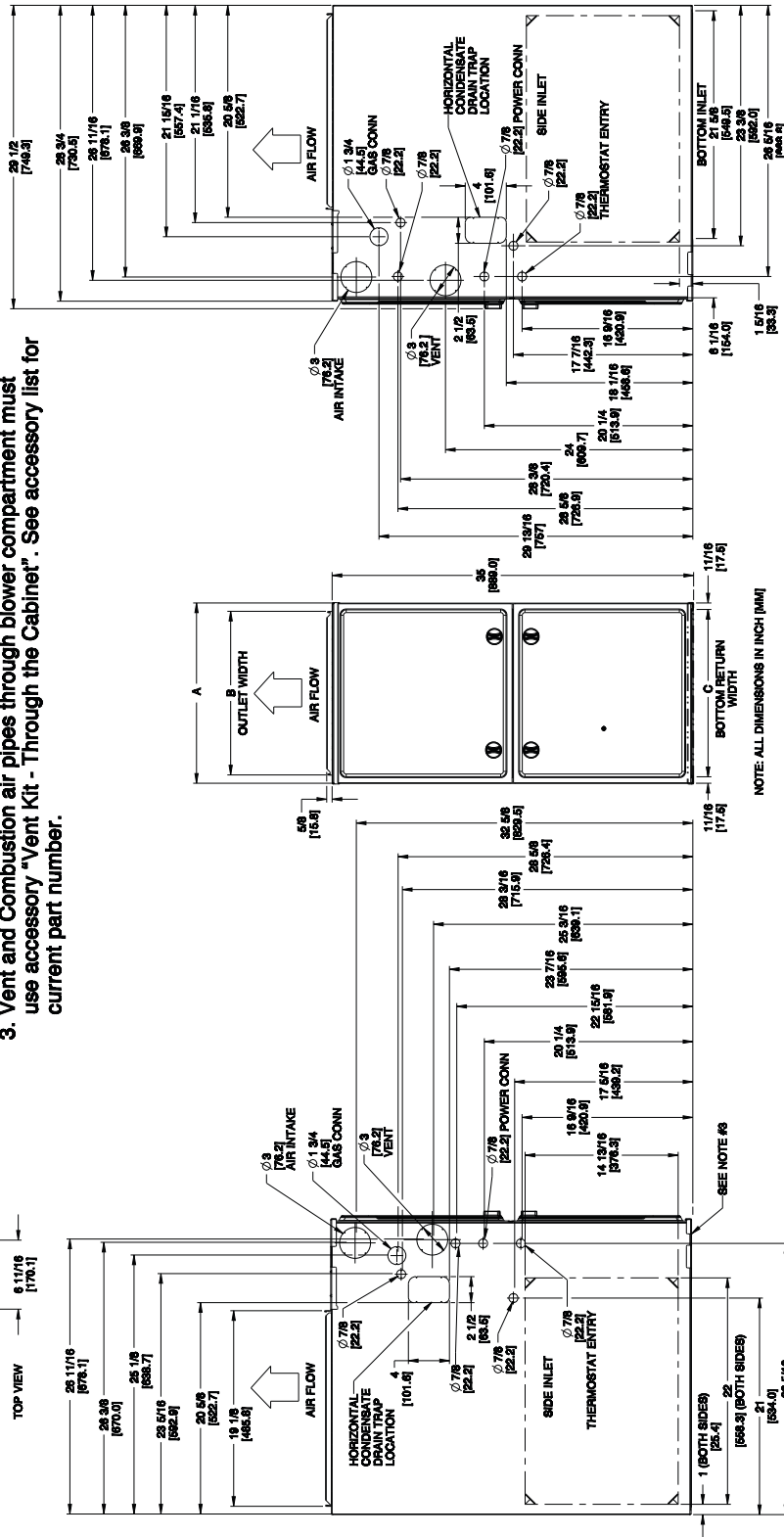
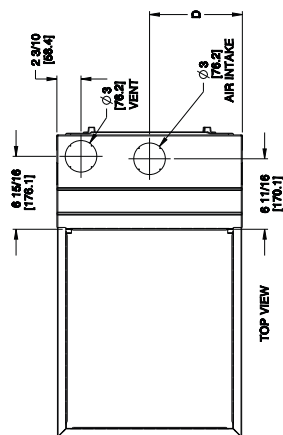
A11387

DIMENSIONAL DRAWING

REV	DATE	BY	CHK	REV
1	05/02/24	4	1	K
2				

NOTES:

- Doors may vary by model.
- Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations for equivalent diameters.
 - For 800 CFM-16-in. (406 mm) round or 14 1/2 x 12-in. (368 x 305 mm) rectangle.
 - For 1200 CFM-20-in. (508 mm) round or 14 1/2 x 19 1/2-in. (368 x 495 mm) rectangle.
 - For 1600 CFM-22-in. (559 mm) round or 14 1/2 x 22 1/16-in. (368 x 560 mm) rectangle.
- Return air above 1800 CFM at 0.5 in. w.c. ESP on 24.5" casing, requires one of the following configurations: 2 sides, 1 side and a bottom or bottom only. See Air Delivery table in this document for specific use to allow for sufficient airflow to the furnace.
- Vent and Combustion air pipes through blower compartment must use accessory "Vent Kit - Through the Cabinet". See accessory list for current part number.



NOTE: ALL DIMENSIONS IN INCH [MM]

A180203

FURNACE SIZE	A	B	C	D	SHIP WT. LB (KG)
	CABINET WIDTH	OUTLET WIDTH	BOTTOM INLET WIDTH	AIR INTAKE	
30040	14-3/16 (361)	12-1/2 (319)	12-9/16 (322)	7-1/8 (181)	121.0 (55.0)
36060					130.5 (59.2)
36040					131.5 (59.6)
42060	17-1/2 (445)	15-7/8 (403)	16 (406)	8-3/4 (222)	142.0 (64.4)
48080					152.0 (68.9)
60080	21 (533)	19-3/8 (492)	19-1/2 (495)	10-1/2 (267)	156.0 (70.8)
80100					166.0 (75.3)
36120	24-1/2 (622)	22-7/8 (581)	23 (584)	12-1/4 (311)	190.0 (86.2)

GUIDE SPECIFICATIONS

General

System Description

Furnish a _____ 4-way multipoise gas-fired condensing furnace for use with natural gas or propane (factory-authorized conversion kit required for propane); furnish external media cabinet for use with accessory media filter or standard filter.

Quality Assurance

Unit will be designed, tested and constructed to the current ANSI Z 21.47/CSA 2.3 design standard for gas-fired central furnaces.

Unit will be third party certified by CSA to the current ANSI Z 21.47/CSA 2.3 design standard for gas-fired central furnaces. Unit will carry the CSA Blue Star® and Blue Flame® labels. Unit efficiency testing will be performed per the current DOE test procedure as listed in the Federal Register.

Unit will be certified for capacity and efficiency and listed in the latest AHRI Consumer's Directory of Certified Efficiency Ratings.

Unit will carry the current Federal Trade Commission Energy Guide efficiency label.

Delivery, Storage, and Handling

Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

Warranty (for inclusion by specifying engineer)

U.S. and Canada only. Warranty certificate available upon request.

Equipment

Blower Wheel and ECM Blower Motor

Galvanized blower wheel shall be centrifugal type, statically and dynamically balanced. Blower motor of ECM type shall be permanently lubricated with sealed ball bearings, of _____ hp, and have infinitely variable speed from 600-1200 RPM operating only when motor inputs are provided. Blower motor shall be direct drive and soft mounted to the blower housing to reduce vibration transmission.

Filters

Furnace shall have reusable-type filters. Filter shall be _____ in. (mm) X _____ in. (mm). An accessory highly efficient Media Filter is available as an option. _____ Media Filter.

Casing

Casing shall be of .030 in. thickness minimum, pre-painted steel.

Draft Inducer Motor

Draft inducer motor shall be two-speed PSC design.

Primary Heat Exchangers

Primary heat exchangers shall be 3-Pass corrosion-resistant aluminized steel of fold-and-crimp sectional design and applied operating under negative pressure.

Secondary Heat Exchangers

Secondary heat exchangers shall be of a stainless steel flow-through of fin-and-tube design and applied operating under negative pressure.

Controls

Controls shall include a micro-processor-based integrated electronic control board with at least 16 service troubleshooting codes displayed via diagnostic flashing LED light on the control, a self-test feature that checks all major functions of the furnace, and a replaceable automotive-type circuit protection fuse. Multiple operational settings available, including separate blower speeds for low heat, high heat, low cooling, high cooling and continuous fan. Continuous fan speed may be adjusted from the thermostat. Cooling airflow will be selectable between 325 to 400 CFM per ton of air conditioning. Features will also include temporary reduced airflow in the cooling mode for improved dehumidification when a T6-PRH is selected as the thermostat.

Operating Characteristics

Heating capacity shall be _____ Btuh input; _____ Btuh output capacity.

Fuel Gas Efficiency shall be _____ AFUE.

Air delivery shall be _____ cfm minimum at 0.50 in. W.C. external static pressure.

Dimensions shall be: depth _____ in. (mm); width _____ in. (mm); height _____ in. (mm) (casing only). Height shall be _____ in. (mm) with A/C coil and _____ in. (mm) overall with plenum.

Electrical Requirements

Electrical supply shall be 115 volts, 60 Hz, single-phase (nominal). Minimum wire size shall be _____ AWG; maximum fuse size of HACR-type designated circuit breaker shall be _____ amps.

Special Features

Refer to section of the product data identifying accessories and descriptions for specific features and available enhancements.

EV 240

INDOOR UNIT

Energy Recovery Ventilator Standard



Download specification at:
renewaire.com/specifications

SPECIFICATIONS

Ventilation Type:
Static plate, heat and humidity transfer

Typical Airflow Range: 100-240 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-100 G5 Core

Standard Features:
White painted cabinet
Line-cord power supply
Low-voltage circuit for controls
Unit may be mounted in any orientation
Cross-core differential pressure ports

Controls:
Onboard 24 VAC transformer/relay package with switched dry contacts

Filters:
Total qty. 2, MERV 8, spun-polyester media:
10 1/2" x 21 3/4" x 1"

Unit Dimensions & Weight:
33 1/2" L x 24" W x 20" H
70 lbs.

Max. Shipping Dimensions & Weight (on pallet):
34" L x 44" W x 34" H
112 lbs.

Motor(s):
Qty. 1, Double-shaft standard motor

Accessories:
Backdraft damper 6", 8"
Automatic balancing damper 4", 5", 6"
Louvered wall vent 6" - white, brown
Louvered wall vent 8" - taupe vinyl, galvanized, paintable galvanneal
Louvered wall vent with 8" round duct connection - 12" W x 8" H
Carbon dioxide sensor/control - wall mount (CO2-W)
IAQ sensor - wall mount (IAQ-W)
Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)
Percentage timer control (PTL)
Push-button point-of-use controls (PBL), PTL req'd.
Percentage timer control with furnace interlock (FM)
MERV 13 filter - OA airstream
Electric duct heater - RH series (1-11.5 kW); designed for indoor ductwork installation only

Note: Indirect Gas-Fired Duct Furnace is not available on the EV240.

ELECTRICAL DATA

HP	Volts	HZ	Phase	Input Watts	FLA
0.2	120	60	Single	216 @ 236 CFM	3.3

UNIT PERFORMANCE

Airflow CFM	ESP in H ₂ O
170	0.80
195	0.70
214	0.60
229	0.50
242	0.40
250	0.30
256	0.20
265	0.10

CORE PERFORMANCE

Airflow CFM	Temp EFF%	Total EFF% Winter/Summer*
170	78	73/59
195	76	71/57
214	75	69/55
229	74	68/54
242	73	67/52
250	73	67/52
256	73	66/51
265	72	66/50

Note: These are core-only ratings and are not HVI certified.

HVI ratings apply to complete units only.

See HVI certification ratings on pg. 24 of Single/Multi-Family Catalog.

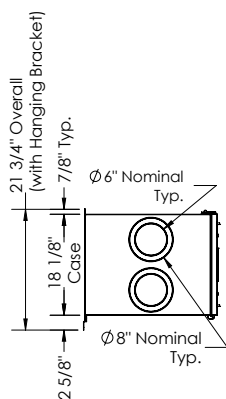
UNIT DIMENSIONS



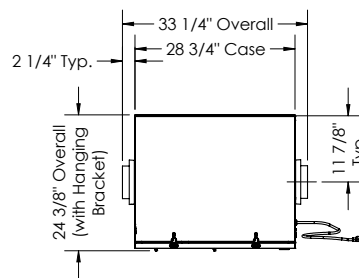
AIRFLOW ORIENTATION
Available as shown in dimension drawing.



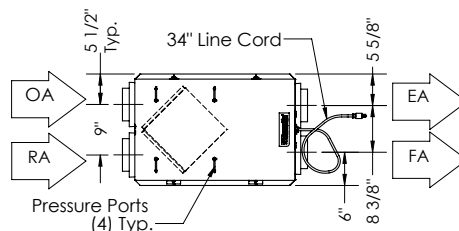
UNIT MOUNTING & APPLICATION
Can be mounted in any orientation. RA/EA airstream can be switched with OA/FA airstream.



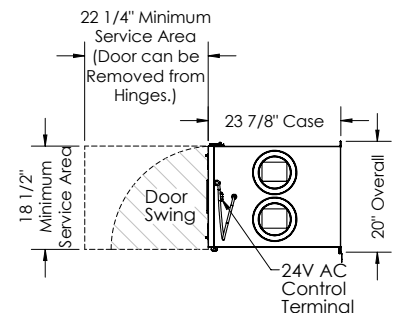
LEFT VIEW



TOP VIEW



FRONT VIEW
(HANGING BRACKET REMOVED FOR CLARITY)



RIGHT VIEW

ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
FA: Fresh Air to inside

INSTALLATION ORIENTATION
Unit may be installed in any orientation.

NOTE
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.

Specifications may be subject to change without notice.