Villa Costella Application for Ductless Air Condition/Heating - June 3, 2025

Contents

Proposal:
Allow owners to install ductless heating/air conditioning under strict guidelines and with approval of design and installation of the Board.

Amended:

1) Currently, one owner (Unit 205) seeking approval with 2 others seriously considering a conversion. This application is for an approval of a concept for the entire building, and any owner deviating from the proposed design would come back to the Landmark Preservation Board for approval.
2) The estimated cost per unit for the modification is approximately $15,000 for installation and equipment. Modifications to the interior of the unit (i.e. drywall repair, soffits, etc.) is estimated at $5,000 but varies depending on how the owner opts to enclose plumbing. There are 20 units in the building.
3) As President of the HOA, I am making application on behalf of the association for a concept for the entire building.

Why:
- Owners requesting option to add air conditioning to deal with rising temperatures and increased smoke risk in summer
    - Window units prohibited in House Rules due to noise and safety concern
- Owners looking for more efficient heat source
- City of Seattle will be issuing a requirement for buildings over 20,000 SF to report how they are reducing energy consumption.

Considerations:

- Homeowners at Villa Costella place a high value on the appearance of the building, so any solution must not denigrate the building's unique and historical aesthetic.
- Care should be taken not to affect building siding.
- Any changes to the exterior requires Landmark Preservation Board approval.
- The solution should not cause any nuisance noise to other residents.
- All associated costs rests with individual owners and installation requires prior approval of the Board and their technical consultant.

Proposed Design Solution:

The Board consulted with True North to investigate feasibility as well as mitigation options for addressing considerations.

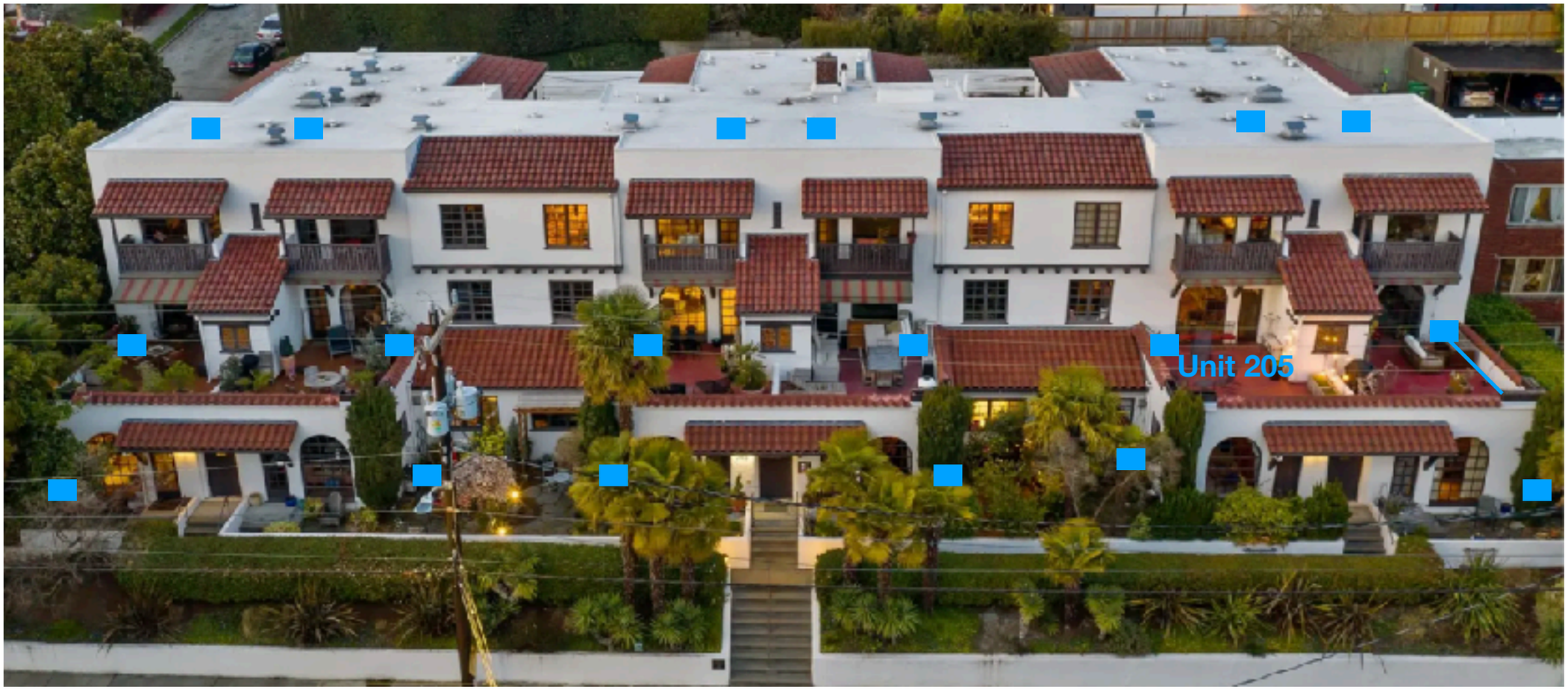
- True North provided installation guidelines that must be met at a minimum to address considerations.
- All plumbing will run inside the owner's unit instead of exterior as is customary, and guidelines for sealing any penetration of exterior.
    - Installation would require demolition and restoration of interior walls at owner's expense.
    - Care taken to position portals to drain mini-splits to minimize impact to building appearance.
- Installation of compressors in locations not visible from the street and with minimal visibility to other units.
- To reduce noise and vibration, units will be installed using isolators. Owners will be required to install latest technology, quietest compressors on the market.
- Owners required to obtain board approval of installation design, and pass inspection of installation from consultant. Rectification or removal will be at owner's expense.

Components:

- One condenser per unit; One condenser can support up to 5 mini-splits
    - Third Floor units on the roof over the unit it serves, and drains to existing roof drain.
    - Second Floor units on their terraces, mounted to wall and drain to scupper. The condenser are mounted to the wall instead of the deck on the 2nd floor units because the deck needs to be resurfaced every 5 years. Resurfacing would require decommissioning the system to remove from the deck, at approximately $1500-2000 each time.
    - First Floor Units on the ground, facing into the courtyard patios, and camouflaged by landscaping and drain to garden
    - Condenser on the 1st and 2nd floor would be covered with vented wood cover to improve appearance.

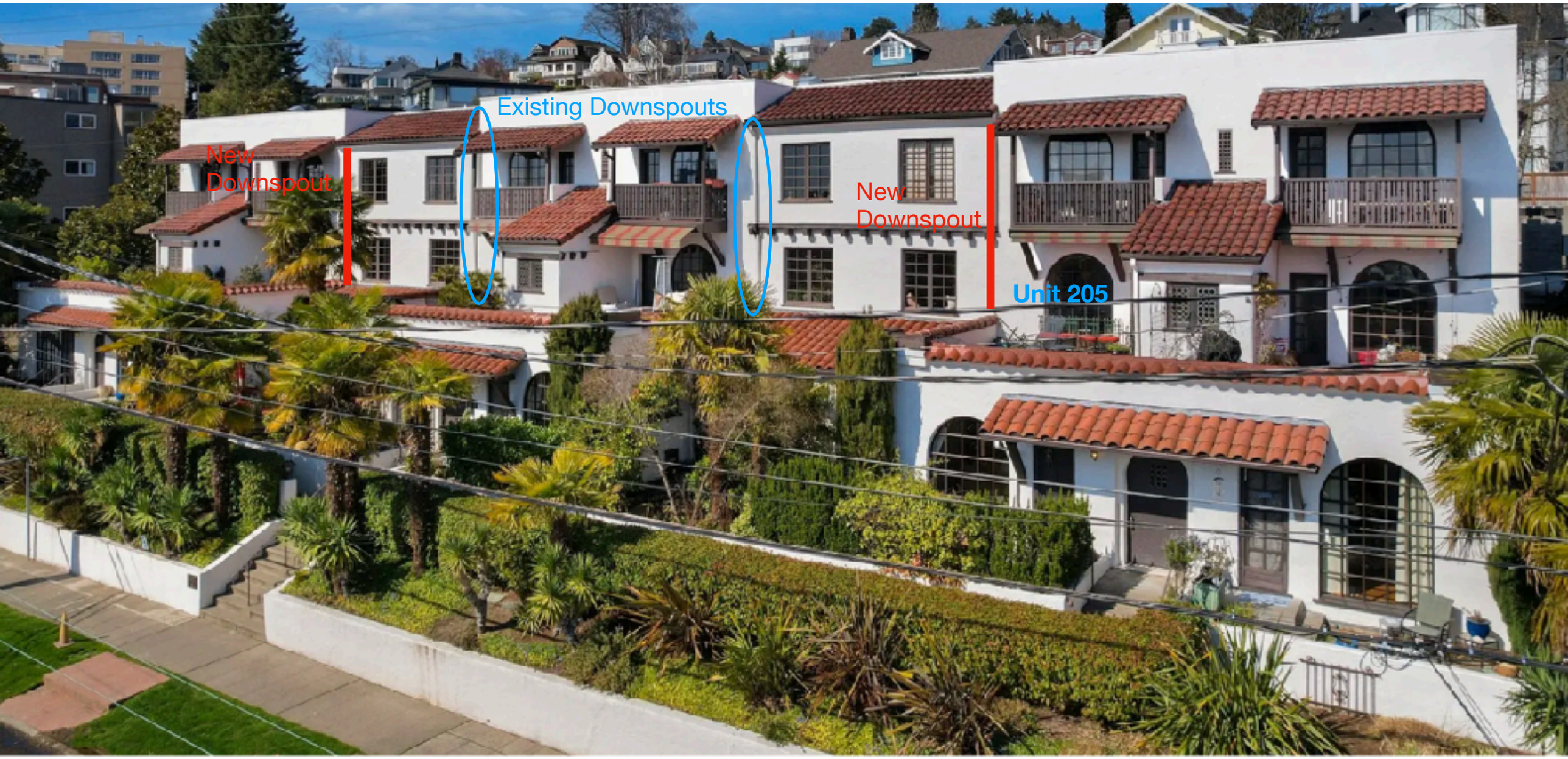
- Mini-split mounted on the interior wall near ceiling, 1-2 per condo unit
    - Third Floor units drain through portal next to gutter drain
    - Second Floor units on their terraces, drain exits onto terrace and runs to scupper
    - First Floor Units drains at portal next to compressor on patio

- Plumbing would be installed in the wall running from the mini-splits to the living room wall and exit through a portal at the compressor.
- The mini-splits and the condenser require 220 V power which will be branched from existing unit heaters, in either the dining room or living room.



Potential for each owner to eventually install mini-splits. This shows location for each condenser.

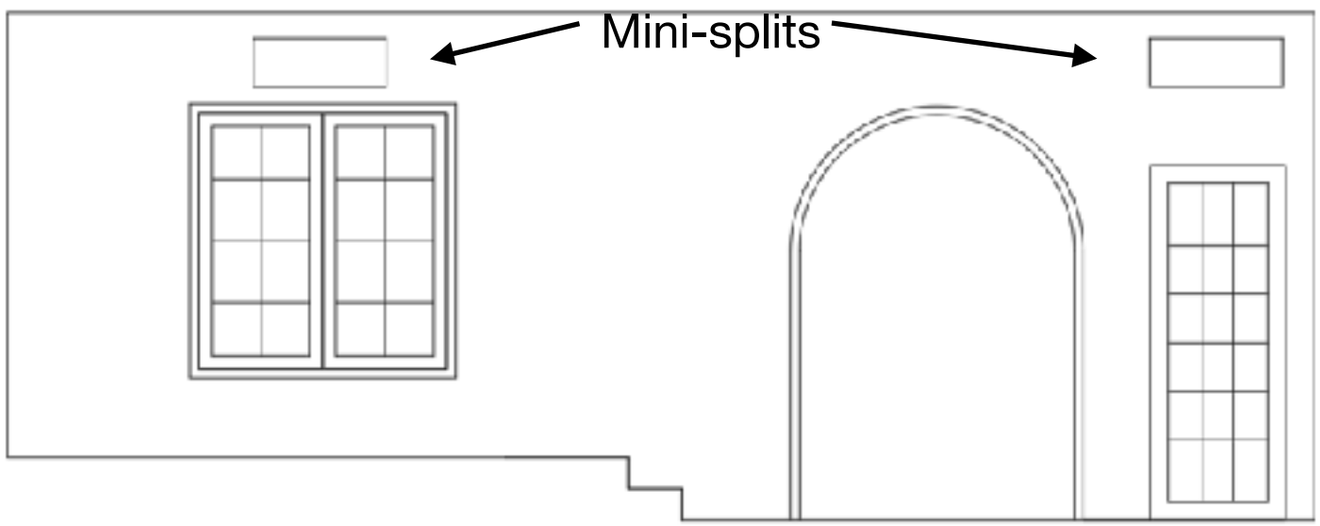
View of building from street, condensers not visible.



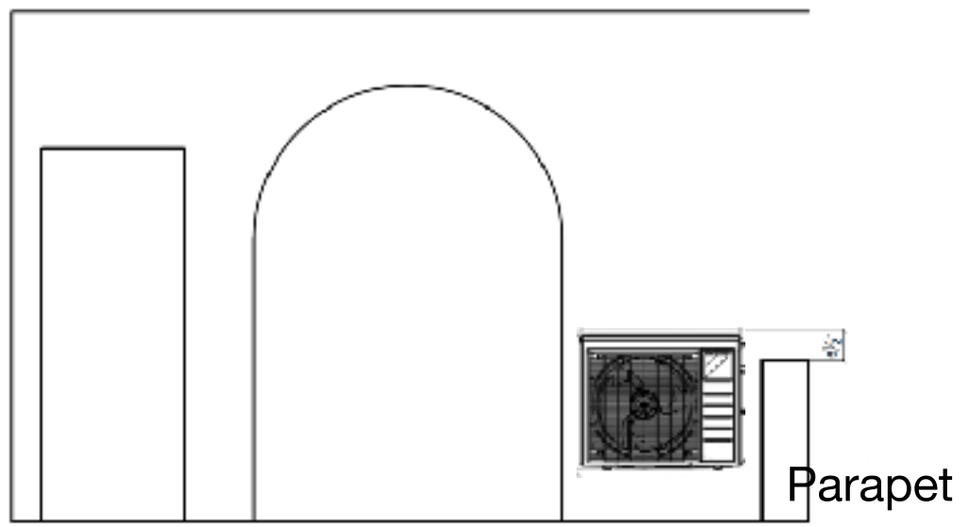
- Plumbing, electrical and coolant lines run inside individual condo unit's walls from the mini splits to the condenser.
- Mini-splits must drain outside the building. This design, drains will run inside the wall until they can exit to a portal next to a gutter drain.
- A maximum of two new downspouts will be added and painted to match the existing ones as indicated above, if required.

Design - Prototype for initial installation in Unit 205 (2nd floor, 2 bedroom unit) installation:

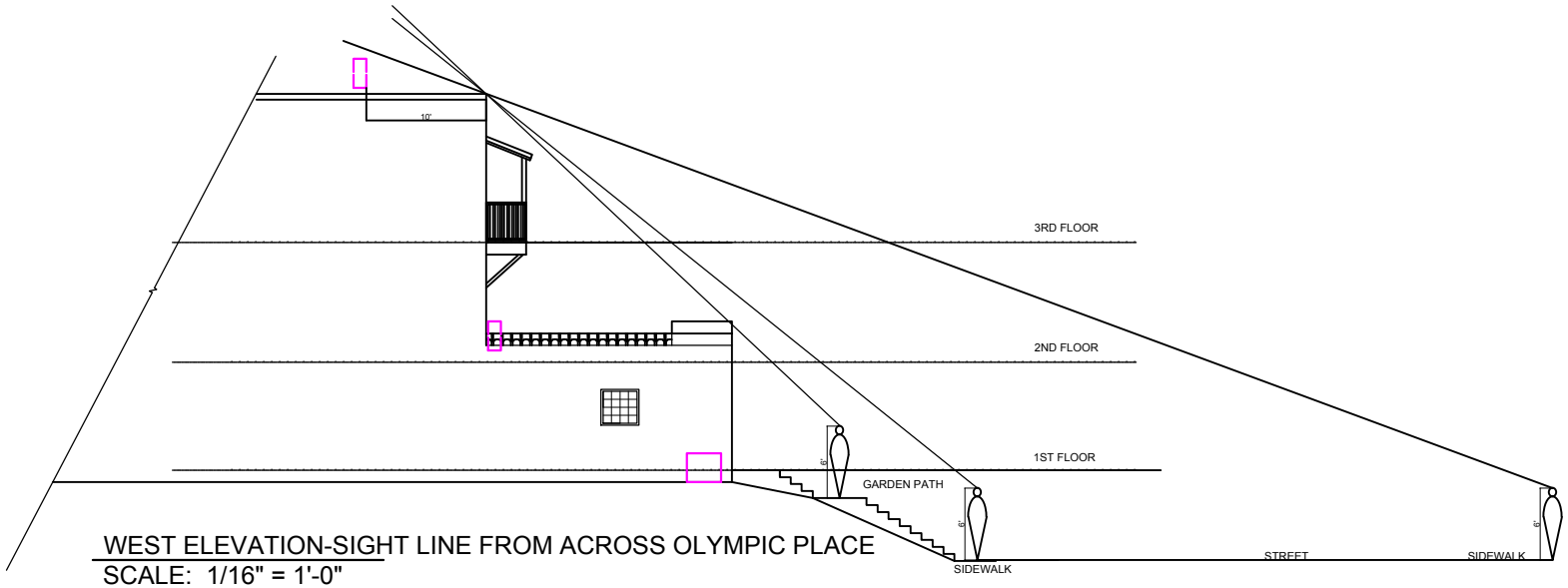
- Unit 205 is on the 2nd floor and has a 300 SF terrace facing South.
- Condenser mounted to exterior wall next to arched window, opposite terrace door.
    - Terraces need to be re-coated every 5 years, so wall mounted preferred. If deck mounted, compressor required to be decommissioned and reinstalled at a cost of about $1500.
    - If wall mounted, the compressor appears 6-1/2” above terrace wall.
- One mini-split would be placed on the interior wall over the terrace door, and one over the dining room window. Washington Energy Services stated that this should be adequate for cooling the entire unit.
- One condenser can support up to 5 mini-splits
- Plumbing would be installed in the wall running from the mini-splits to the living room wall and exit through a portal at the condenser.
- Electrical power to the condenser, and plumbing between the condenser and mini splits, penetrate from the interior to the condenser at one location.
- A drain from the condenser runs along the parapet wall at deck level to the terrace scupper.
- The mini-splits and the condenser require 220 V power which will be branched from existing unit heaters, in either the dining room or living room.
- Approximate cost for this installation is $20,000, all in ($15,000 for installation of equipment and $5,000 for interior soffit and drywall repair).



Interior Elevation



Exterior Elevation



WEST ELEVATION-SIGHT LINE FROM ACROSS OLYMPIC PLACE

SCALE: 1/16" = 1'-0"

SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

HIDDEN CONDENSERS

CONDENSERS

EXISTING DOWNSPOUTS

NEW DOWNSPOUTS

DRAIN ($\frac{3}{4}$" WHITE PIPE)

TRUE NORTH
CONSTRUCTION MANAGEMENT
INC

VILLA COSTELLA – MINI SPLIT INSTALLATION GUIDANCE

AT THE LOCATION OF:

Villa Costella Condominium

348 West Olympic Place
Seattle, WA 98119

FOR:

Villa Condominium Association

c/o Board of Directors
348 West Olympic Place
Seattle, WA 98119

PREPARED BY: Jordan E. Crump, RRO, REWO

DATE PREPARED: November 20, 2024

INTRODUCTION

The following installation guidance and recommendations is for Owner installed HVAC systems at the Villa Costella Condominium. True North Construction Management, Inc. (TNCM) has been requested to consult on building envelope penetrations as a result of heating and cooling mini-split system installations at the Villa Costella Condominium located at 348 West Olympic Place, Seattle, WA 98119. The subject property is approximately 0.57 acres and is located on the north side of West Olympic Place in the Queen Anne neighborhood of Seattle. There is one 3-story building containing 20 residential condominium units. According to King County Records, the property was constructed in 1929. The property slopes down to the south and consists of a parking lot, a carport, concrete sidewalks, and mature landscaping outside of the building itself. Adjacent to the property there are other condominiums and apartment buildings.

The roof of this building is primarily flat and is surfaced with TPO single-ply roof surfacing with a pitched roof surfaced with Spanish tile installed at mansard areas of the roof perimeter. The exterior of this building is clad with Stucco with is coated with an acrylic coating. The windows of this building are primarily the original wood-frame, single-pane windows. The decks are solid membrane decks which are surfaced with elastomeric coating.

PROJECT SCOPE

The scope of work primarily includes Owner installed heat pump systems with indoor mini-split units. The Villa Costella Condominium Board of Directors must approve all installations, including the location of outdoor compressor units, prior to commencement of any construction activities. It is the Contractors responsibility to provide calculations, diagrams, and product submittals necessary for Board of Director review and approval. The Contractor shall also ensure all work is completed in conformance with all applicable state and local building codes, current industry standards, construction practices, and manufacturer's recommendations and installation requirements.

1) General

A) Landscaping: Contractor shall take care as to not damage existing landscape materials and plantings. Contractor shall notify the Board of Directors of any landscaping requiring pruning or removal no less than 14 days prior to the start of construction.

B) Safety: Contractor shall take necessary measures to ensure safety while on-site, including use of fall protection and temporary railings, where required. Contractor shall comply with all regulations enacted by WISHA, as well as those enforced by other regulatory agencies.

C) Permits: Contractor shall obtain and pay for all required building permits for heat pump installations as required by the City of Seattle Department of Construction and Inspections.

D) Crew Supervision: Contractor is responsible for all crew members under its supervision. Contractor and all Subcontractors' crews shall maintain appropriate jobsite behavior, including, but not limited to, no smoking, drugs, alcohol, profanity, pets, or jobsite radios. Contractor shall appropriately provide garbage receptacles for crew members' trash. Contractor shall conduct background checks suitable for individuals expected to work in occupied units.

E) Mitigation of Damages: During construction, protect all adjacent property and structures from damage, including, but not limited to, subsidence, erosion, and falling materials and tools. Contractor shall have the opportunity, and is strongly encouraged, to document any damage existing at the start of the project. Repair of damage caused by the Contractor or any Subcontractor operations shall be the sole responsibility of the Contractor and shall be performed expeditiously with the utmost care and skill.

F) Cleaning: The Contractor shall engage in daily cleanup to the extent required to keep the site, building, and units free of debris. Contractor shall also leave all units in a clean and orderly condition upon completion of each days' work. Upon completion of the Work, Contractor shall effectively clean all exterior and interior surfaces affected by the Work. This includes, but is not limited to, interior and exterior window frames and glass, interior and exterior of man doors and frames, interior finishes, decks, patios, guardrails, stairs, sidewalks, floor surfaces, hallways, etc. All shall be free of dust, staining, residue and debris.

0' Heat Pump Mini Split Installations:

?' Outdoor Units / Exterior Penetrations: All equipment installations completed as part of this work shall conform with all local building code requirements. All work shall be performed by a licensed mechanical contractor that is insured to work in Condominiums.

g' The installation location for new outdoor compressor units varies by unit and is outlined in further detail below:

&/' Ground Floor Units: Outdoor compressors shall be placed on ULTRALITE Condenser Pad's or approved equal.

&_' Condenser Pad's shall be appropriately sized to the compressor where installed. Contractor shall modify existing grade as needed to create a level base for condenser pad installations. Install crushed rock and compact to refusal prior to placing condenser pad.

&`' Furnish and install AIREX TitanOutlet at through-cladding penetration utilized for routing refrigerant piping (line sets). Please reference the product data sheet included in the appendices of this document for further information.

&0' 2nd Floor Units: Outdoor compressors shall be wall-mounted on outdoor rated wall mounting brackets including appropriate vibration dampers. Wall mounting brackets should be appropriately sized to the compressor where installed. Furnish and install AIREX TitanOutlet at through-cladding penetration utilized for routing refrigerant piping (line sets). Please reference the product data sheet included in the appendices of this document for further information.

&1' 3rd Floor Units (Top Floor): Outdoor compressors shall be curb mounted at the roof. It is the Owner's responsibility to ensure roofing work is performed by a qualified, manufacturer approved installer and includes the following:

&_' Furnish and install new wood sleepers to support the mechanical units above the finisheb roof 8-inches (minimum) **to 12 - inches (maximum)**. Install compatible single-ply TPO membrane at newly installed sleepers per NRCA detail TP-10. Hot air weld seams as to ensure a uniform membrane installation where installed. Install sheet metal cover over newly installed TPO membrane per NRCA detail TP-10. Outdoor compressor shall be mounted on newly created and waterproofed sleepers and attached with vibration isolation dampers. Pre-drill mounting locations and pre-dress holes with membrane manufacturer approved sealant.

&`' Through-Roof Penetrations: Furnish and install RoofGooseJack RJ4 Utility flat roof lineset termination. Contractor shall ensure pipe penetrations are completed in conformance with the product manufacturers installation guidelines. Following the completed RJ4 installation, install compatible premanufactured single-ply TPO penetration flashing per NRCA detail TP-20 or TP-20A. Hot air weld seams as to ensure a uniform membrane installation where installed. Contractor shall ensure penetration flashing is secured with a drawband or hose clamp and sealed to ensure a watertight connection between the penetration flashing and pipe penetration.

gg' In all cases refrigerant piping and equipment control wiring shall be installed through a single through-building penetration. Routing of refrigerant piping (line sets) and/or controls on the building exterior is strictly prohibited.

ggg' At locations where refrigerant lines penetrate existing exterior cladding, Contractor shall ensure penetrations are water-tight and properly sealed. Contractor shall assume Pecora DynaTrol I-XL Hybrid sealant at refrigerant penetration locations.

@' Interior Units / Drywall Openings:

g' Carefully remove existing interior drywall and/or plaster as required for refrigerant line routing. Routing of refrigerant piping shall be completed from the unit interiors only. Routing of refrigerant piping (line sets) and/or controls on the building exterior is strictly prohibited. Contractor shall

ensure drywall and/or plaster openings are adequate to fully support and mount new gypsum board at existing framing members.

ii) Install new refrigerant lines and electrical branch and/or control lines at wall and ceiling cavities as necessary for new equipment installations.

iii) Install fire stop sealant, caulk, foam, or putty as needed to ensure to closures meet or exceed current fire code and acoustical ratings. Contractor shall coordinate fire-stop permit inspection as needed prior to covering wall / ceiling opening locations.

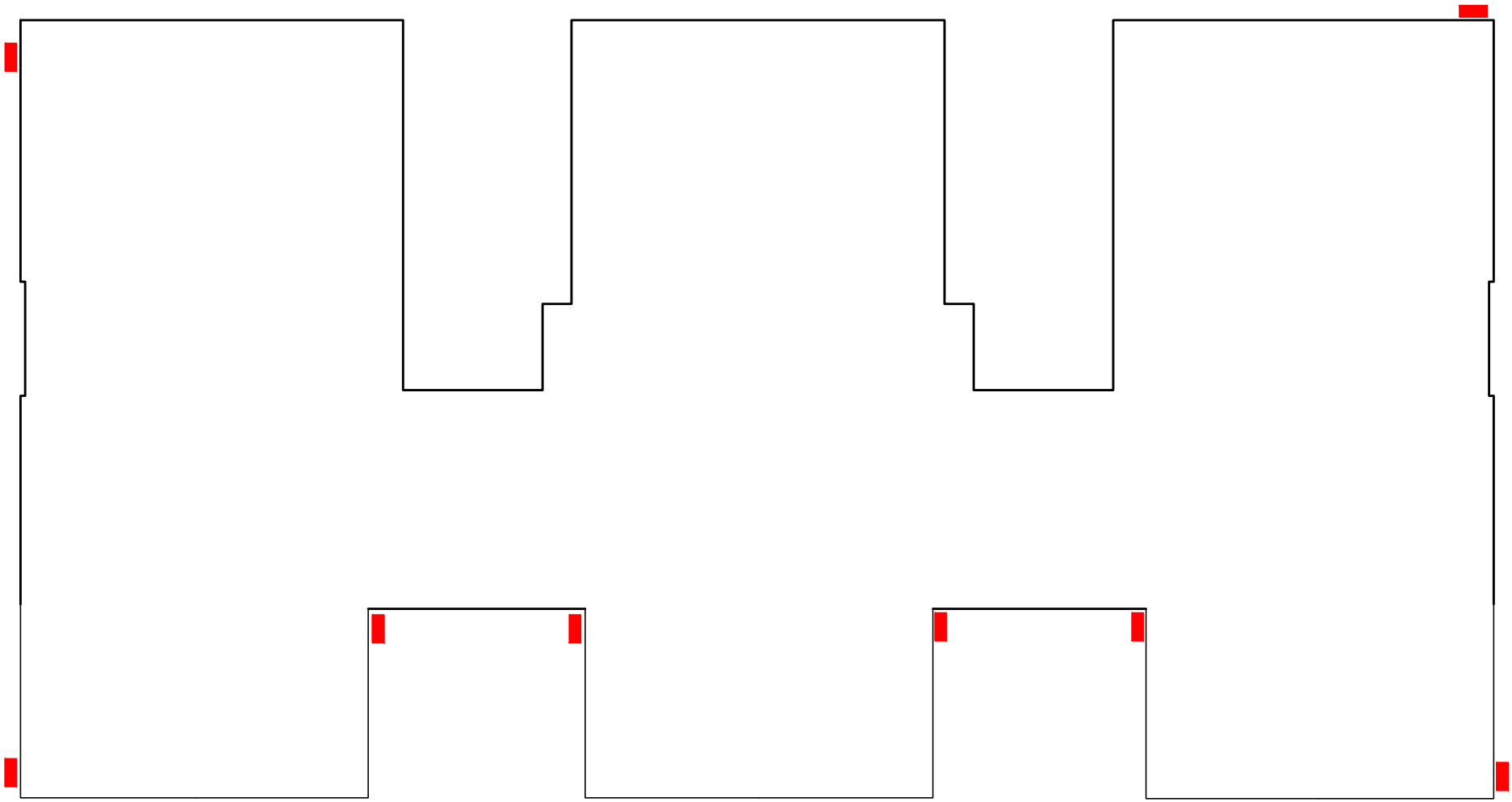
iv) Patch drywall openings to best possible match of immediately adjacent surfaces. Patch locations shall be level, smooth without humps or uneven surfaces, which create an architecturally pleasing finish. Skim coat surface with joint compound for a smooth, feathered finish. Level, smooth and sand extent of wall or ceiling patch or within scope of work to prepare surface for paint finish; feather work area edges into original wall or ceiling surfaces. Match existing texture of adjacent wall or ceiling finishes, or as otherwise directed by Construction Manager. Extent of new finish texture shall be visually indiscernible from original texture.

v) Prime and paint newly installed drywall and paint to best possible match of existing. Interior painting at drywall patch locations shall be corner to corner, edge to edge, extent of full plane or to the nearest change in plane, including any existing materials that are adjacent to materials and components scheduled to receive paint applications.

vi) Install new Indoor mini-split units per the manufacturer's installation guidelines. Contractor shall ensure proper operation of newly installed equipment, and allocate time for system operation overview with Owner

C) Electrical: All electrical installations completed as part of mini split installations conform with all local building code requirements. All electrical work shall be performed by a licensed electrician that is insured to work in Condominiums.

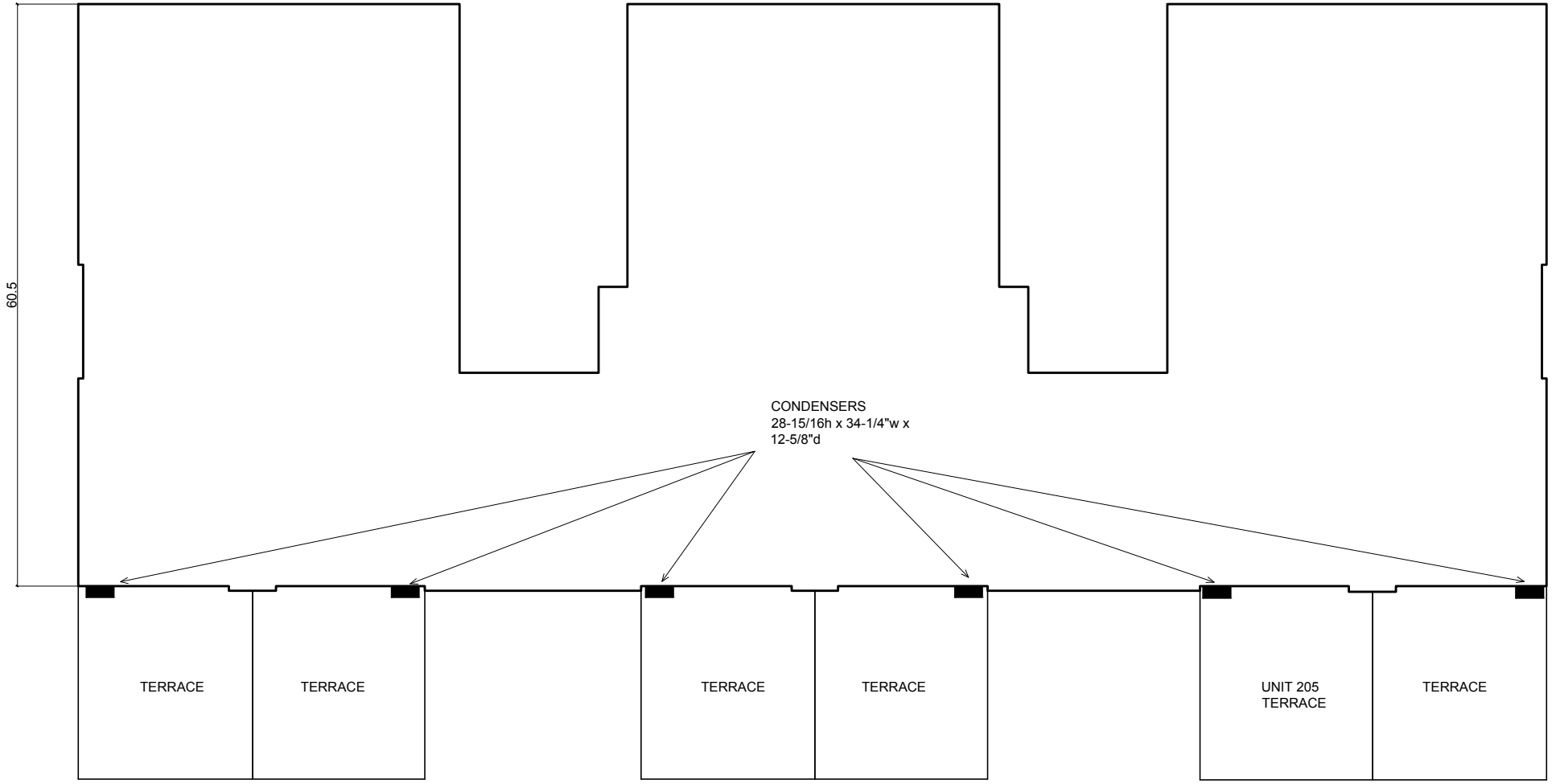
Appendices:
Lower Floor Plan
Main Floor Plan
Roof Plan
NRCA Detail TP-10
NRCA Detail TP-20
NRCA Detail TP-20A
RoofGoose Jack – RJ4 Utility – Product Data Sheet
AIREX – TitenOutlet – Product Data Sheet
Pecora Corporation – DynaTrol I-XL Hybrid Sealant – Product Data Sheet



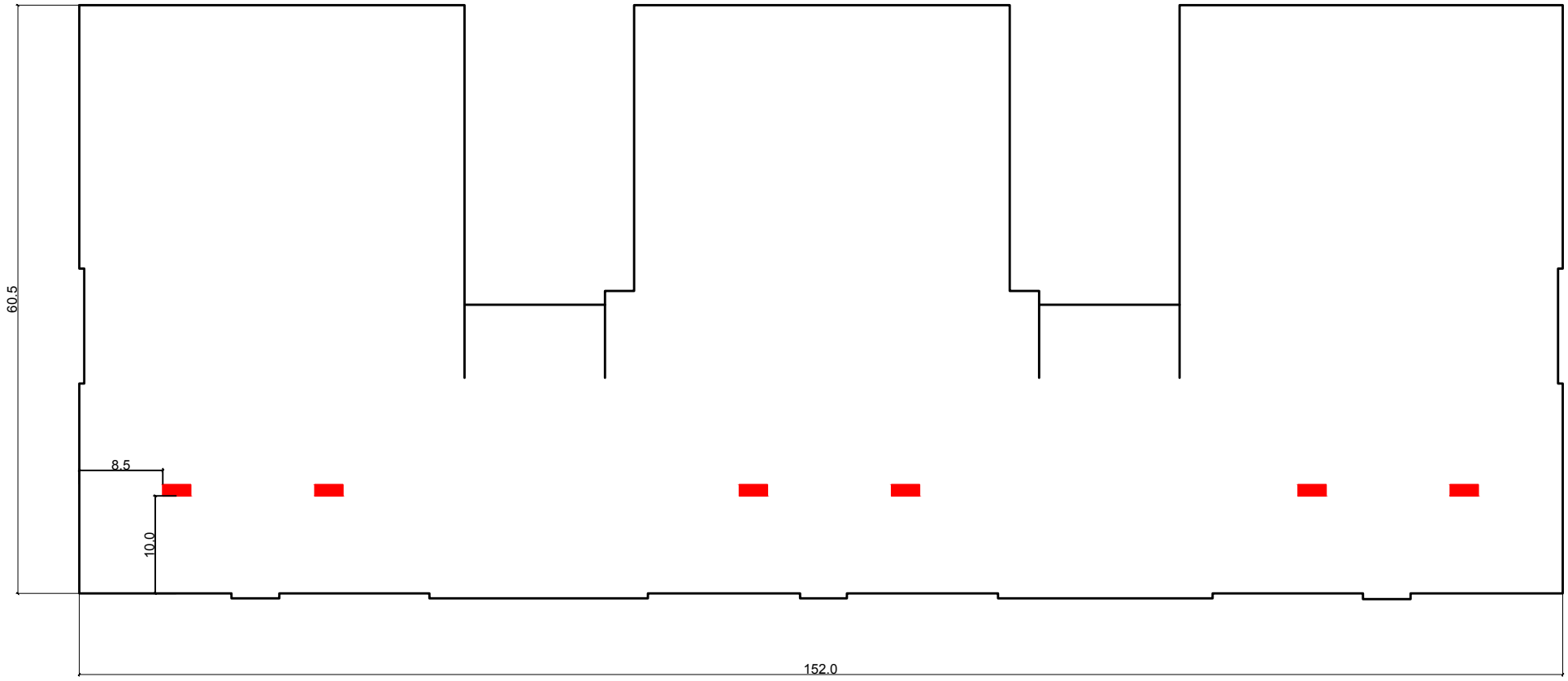
OUTDOOR CONDENSERS
28-15/16"h x 34-1/4"w x 12-5/8"d

1ST FLOOR PLAN VIEW

N



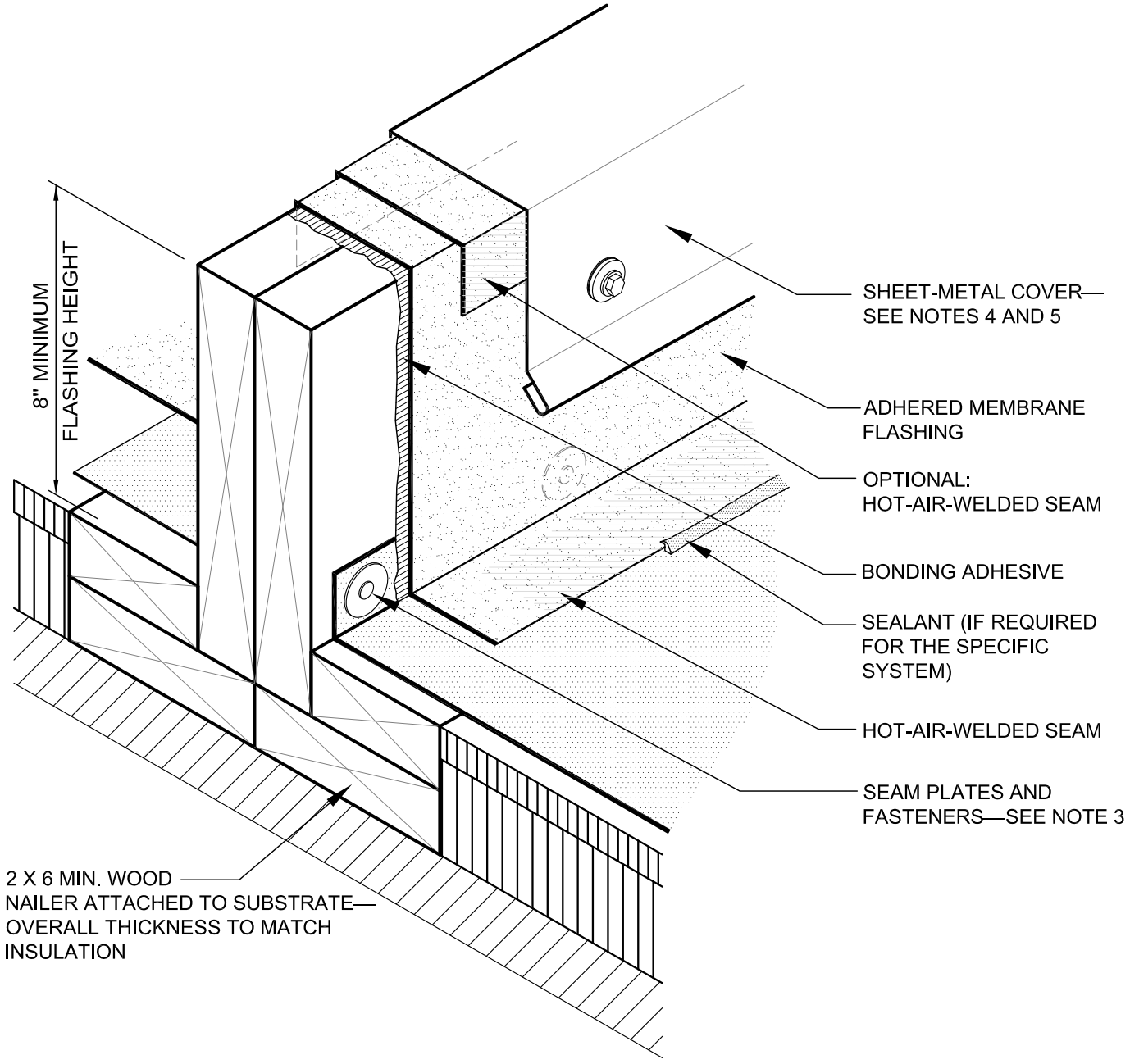
2ND FLOOR PLAN VIEW



OUTDOOR CONDENSERS
28-15/16"h x 34-1/4"w x 12-5/8"d

ROOF VIEW

N

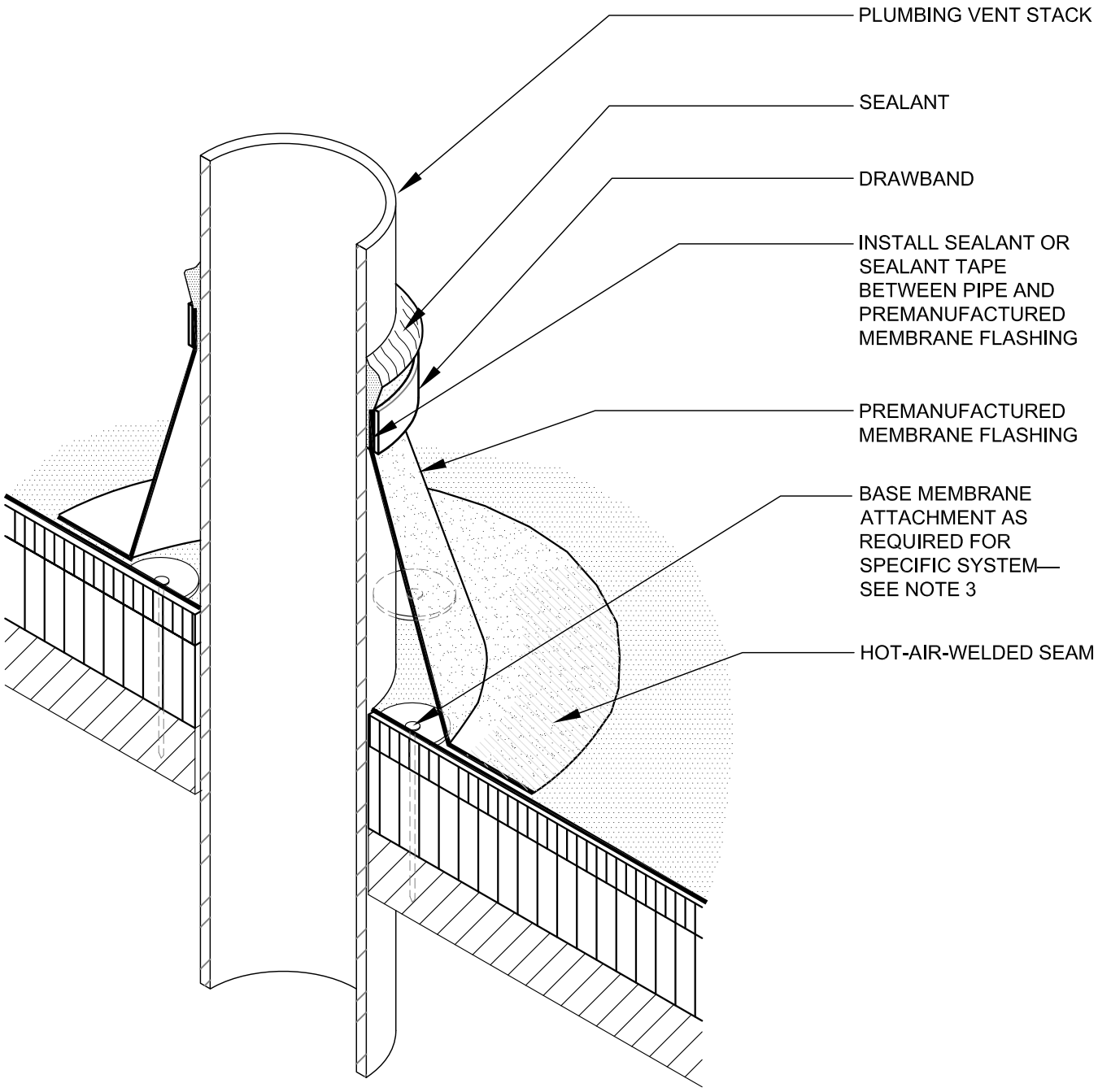


NOTES:

1. AN AREA DIVIDER SHOULD NEVER RESTRICT THE FLOW OF WATER.
2. FLASHING REQUIREMENTS ARE TYPICAL FOR BOTH SIDES OF THE AREA DIVIDER.
3. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ALTERNATIVE BASE SECUREMENT OPTIONS.
4. REFER TO THE ARCHITECTURAL METAL FLASHING SECTION OF THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING AND CONDENSATION AND AIR LEAKAGE CONTROL FOR DESIGN, JOINERY AND SECUREMENT OPTIONS FOR SHEET-METAL COVERS.
5. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

BASE FLASHING AT AREA DIVIDER IN ROOF SYSTEM

2023 *NOT DRAWN TO SCALE* **TP-10**

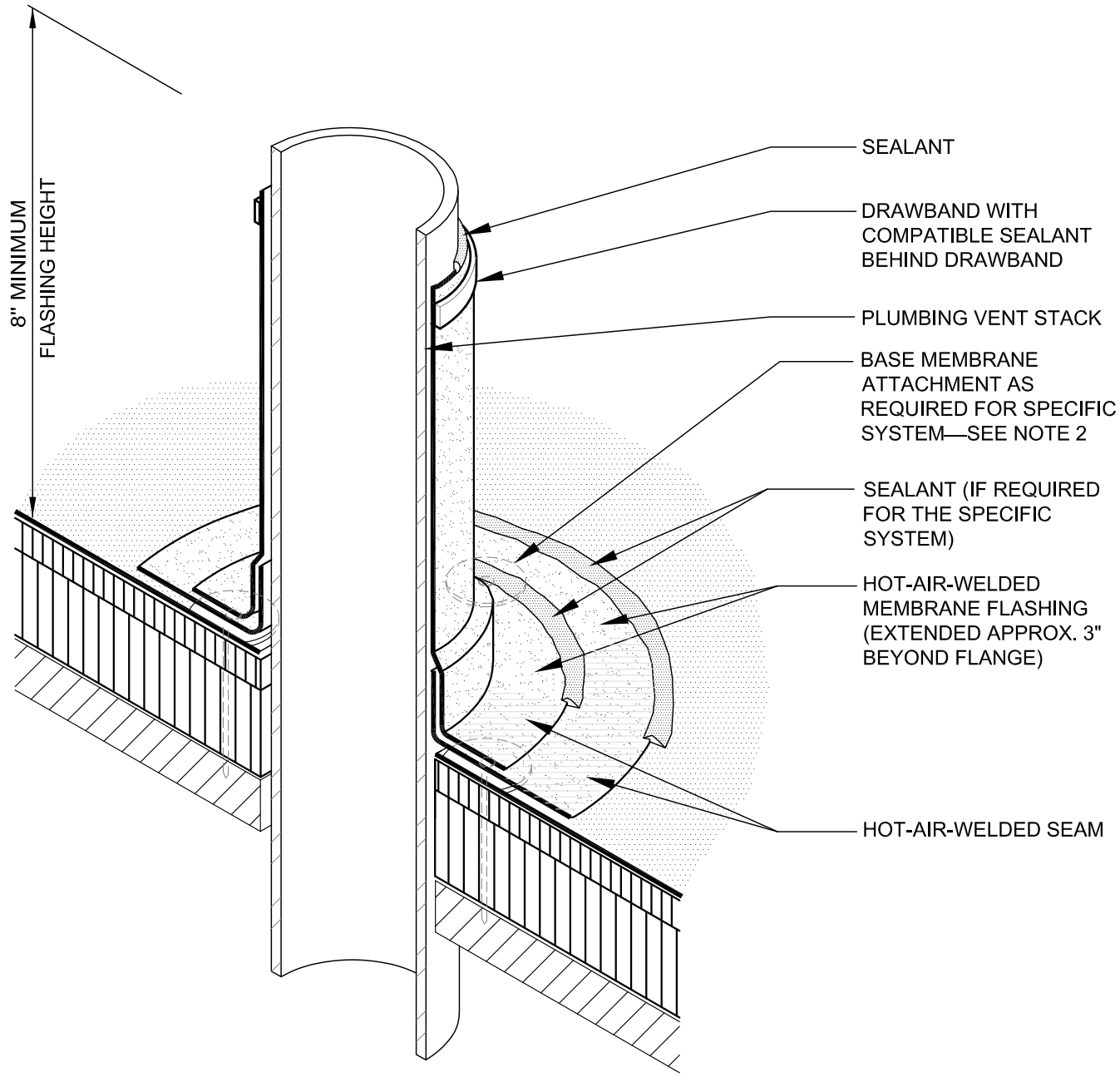


NOTES:

1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12 INCHES OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING. SEE THE INTRODUCTION TO THE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.
2. NRCA RECOMMENDS FLASHINGS BE 8 INCHES HIGH; HOWEVER, NRCA IS AWARE PREMANUFACTURED BOOT FLASHINGS GENERALLY WILL NOT MEET THE HEIGHT REQUIREMENT.
3. REFER TO MANUFACTURERS' SPECIFICATIONS FOR SPECIFIC REQUIREMENTS FOR BASE MEMBRANE ATTACHMENT AND PLACEMENT. MECHANICALLY ATTACHED SYSTEMS GENERALLY HAVE SPECIFIC ATTACHMENT REQUIREMENTS FOR PENETRATION LOCATIONS.
4. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

PLUMBING VENT [PREMANUFACTURED BOOT]

2023 *NOT DRAWN TO SCALE* **TP-20**



NOTES:

1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12 INCHES OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING. SEE THE INTRODUCTION TO THE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.
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3. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

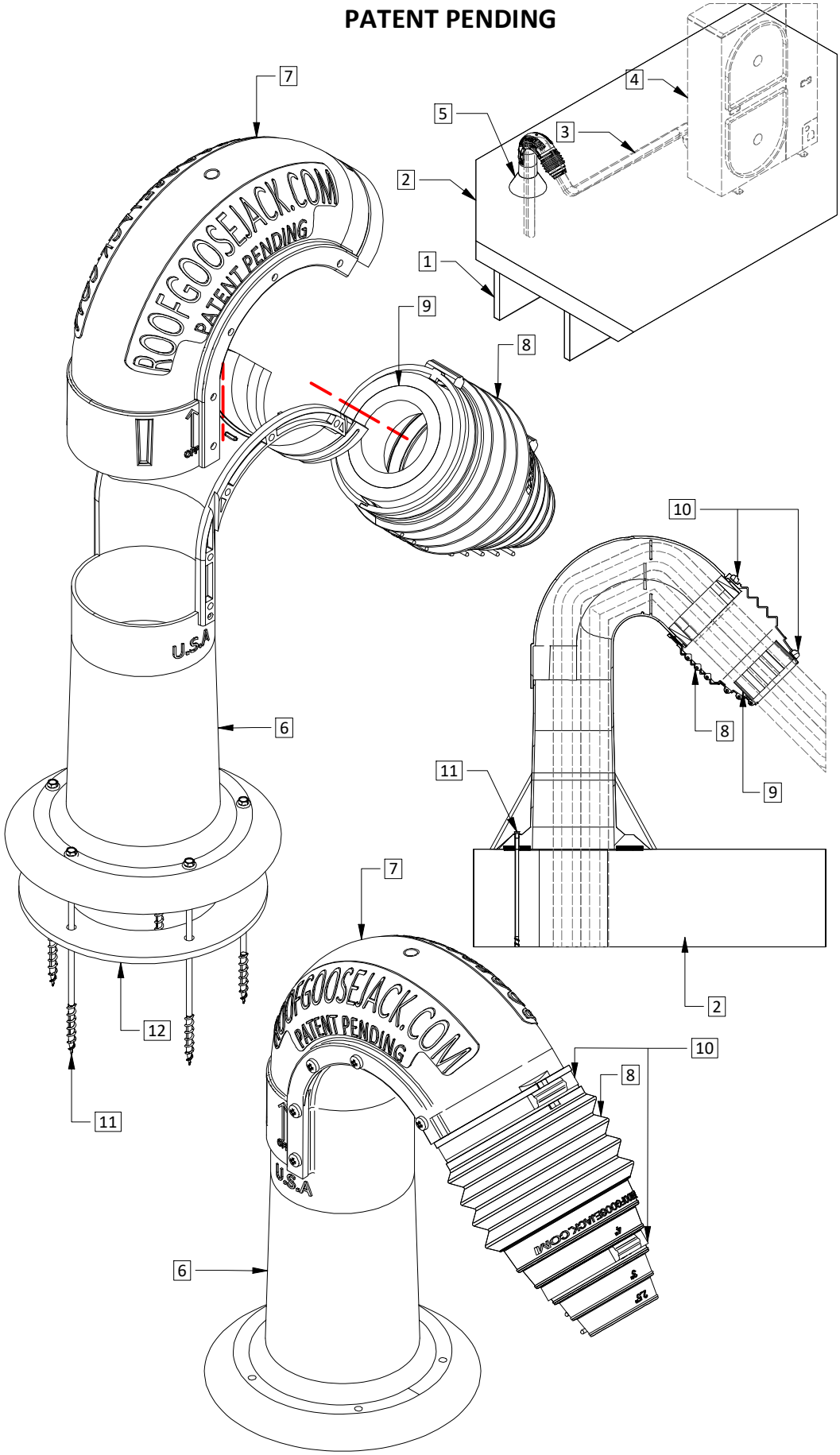
PLUMBING VENT [FIELD WRAP]

2023

NOT DRAWN TO SCALE

TP-20A

PATENT PENDING



RoofGooseJack
SUPERIOR HVAC TERMINATIONS

RoofGooseVent LLC,
345 Compass Cir #17
North Kingstown, RI 02852
Telephone: 401-522-9857
www.RoofGooseVent.com
sales@RoofGooseVent.com

Model

RJ4 - UTILITY

Application

- Flat Roof Lineset Termination. Easily Accommodate Soft/Malleable Copper Linesets
- Can Accommodate Up To (4) 1/2" Pipe Insulation On 5/8" Or 3/4" Tube; With (4) 3/8" Un-Insulated Tube And All Necessary Control Wires. Unobstruced Internal Diameter Of Device Is 4-1/3". See Examples Below.
- Recommended Not To Exceed Tubing Diameter Greater Than 7/8"

Item Description

1. Roof Sub Structure
2. Insulation And Roof Membrane
3. Refrigeration Line Sets (Field Supplied)
4. Hvac Condenser / Heat Pump (Field Supplied)
5. Roofer's Flashing (Field Supplied)
6. Roofgoosejack Base With Flange
7. Roofgoosejack Lid
8. Removable Flexible Line Set Jacket
9. Included Draft Stopping
10. Stainless Steel Hose Clamp
11. 8 Inch roof fasteners
12. Gasket Under Flange

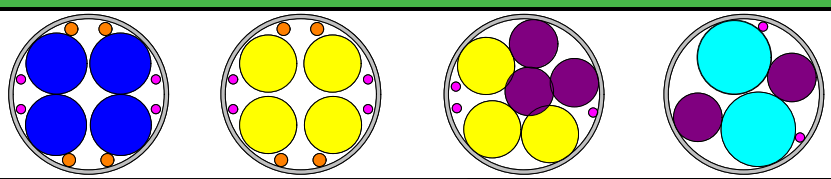
Benefits

- Rigid Plastic Material Testing: Astm D1929, Astm D635, Astm G155 (4500 Hrs) & Astm D638 Certified
- Elastomeric Material Testing: UL 94 HB, UL 746C F1, ASTM D746 -76°F, ASTM D412
- Eliminates Insulation Gap On Line Sets That Are Present When Using Pitch Pockets.
- Allows Roofer To Flash Line Set Penetrations Easily Without The Use Of A Pitch Pocket.
- Gasketed Base Flange For Temporary Water Proofing Before Being Permanently Flashed Into A Flat Roof.

Features

- Tapered Flexible Jacket That Can Be Cut To Size Depending On The Number Of Line Sets Being Run With Outlet Diameters Ranging From 2.5" - 4.5"
- Draft Stopping And Hose Clamps To Prevent Water And Pest Infiltration.
- Unobstructed Access To Line Sets And Control Wires Without Damaging Waterproofing.
- No Need For Caulk Or Adhesives To Create Waterproofing Once Flashed Into Roof Accordingly.

Examples Of Pipe Configurations



Key

- Control Wire
- 5/8" Tube W/ 3/4" Insulation
- 3/8" Bare Tube
- 5/8" Tube W/ 1/2" Insulation
- 3/4" Tube W/ 1/2" Insulation
- 3/8" Tube W/ 1/2" Insulation

Updated 08-11-22

AIREX TITANOUTLET™

Seals HVAC Piping Wall Penetrations

Energy Efficient Product

U.S. Patents
9,091,377 B2
9,523,200 B2

- ✓ Sustainable Gasket Sealing System
- ✓ Seal Allows Expansion and Contraction
- ✓ Prevents Air Leakage ASTM E283 & Moisture Penetration ASTM E331
- ✓ Superior Weather & UV Resistance UL F1 Construction
- ✓ Prevents Rodent & Outdoor Air Intrusion
- ✓ Flexible Sleeve Isolate Piping for Vibration & Noise Reduction
- ✓ Permanent Support for Refrigeration Pipe
- ✓ Optional 3/4" Gasket for Lapsiding

TGS Model

Retrofit TRS Model

TSS Model

FULL CODE COMPLIANCE

Air Barrier Penetration Sealing

"Penetrations sealing shall allow for expansion and contraction of materials and mechanical vibration" C402.5.1.1, R402.4.1.1, R402.4.1.2

Air Leakage (Mandatory)

C402.4 & C402.4.2, C402.5

International Energy Conservation Code (IECC)

ASHRAE 90.1 5.4.3.

Refrigerant Pipe Penetration Sealing

"wall, floor or ceiling assembly penetrated by a refrigerant pipe shall be sealed in an approved manner"

International Mechanical Code 1109.4 2021, 2024
Uniform Mechanical Code 1107.6

Refrigerant Pipe Support

"...shall be securely fastened to a permanent support within 6 feet (1829mm) of the condenser."

International Residential Code M1411.8 2021, 2024

Rodent Proofing

International & Uniform Mechanical Codes
International Building Code Appendix F

Refrigeration Piping Vibration & Stress

Uniform Mechanical Code -1111.0
International Mechanical Code -1109.6

TITAN OUTLET APPROVED PERFORMANCE TESTING

- ASTM E283 Standard Test Method for Air Leakage
- ASTM E331 Standard Test Method for Water Penetration
- ASTM E 2178 Air Permeance of Building Material
- ASTM D1525C Temperature Deformation Test
- ASTM D648 Temperature Load Deformation Test
- UL 94 HB Flammability Test
- UL 746C Outdoor Suitability – Rating F1

TITAN OUTLET SLEEVE

- ASTM D573 Deterioration Test
- ASTM D746 Brittleness Temperature Impact Test

New 3/4" Gasket
Perfect For Sealing Lapsiding, Masonry & Stucco

LIMITED 10 YEAR WARRANTY

Made in the USA

AIREX Manufacturing Inc.

SUBMITTAL SHEET

AIREX TITANOUTLET™

Energy Efficient Product

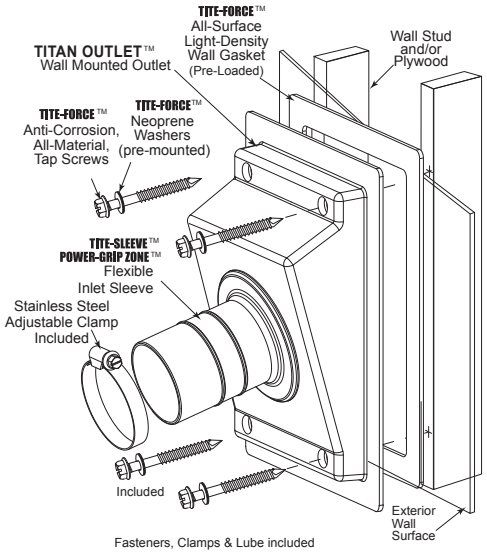
Project _____

Contractor _____

Date _____

Specification Reference _____

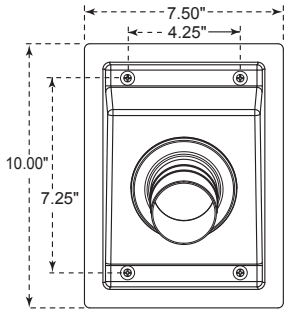
Comments _____



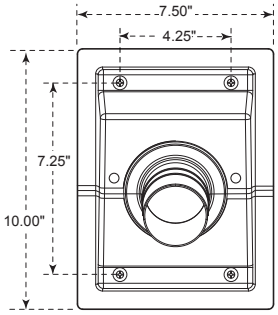
Fasteners, Clamps & Lube included

SPECIFICATIONS

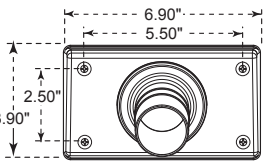
AIREX TITAN OUTLET™ - A wall outlet seal by Airex Manufacturing Inc., shall be provided and installed with its compression gasket mounting method and must be fastened to wall surface with supplied ICC-ES listed and approved non-corrosive screws with pre-loaded neoprene washers as a permanent support for the refrigerant pipe per Mechanical and Residential Codes. Wall Outlet must also integrate an over-molded, flexible, elastomeric sleeve for sealing, supporting and isolating refrigerant pipes to also control vibration. The Wall Outlet shall also feature outdoor-rated durability and shall provide wall sealing expansion and contraction protection features achieved by gaskets and seals as per Energy and Mechanical code penetration seal requirements. A stainless-steel clamp must be utilized to create a "Mechanical Connection" between wall seal and pipe insulation protector as intended per mechanical codes to allow for visual inspection of piping and removable/reusable maintenance capabilities intended by Energy and Mechanical Codes. Outlet shall be designed to co-act with the AIREX E-FLEX GUARD™ Pipe Insulation Protection Cover. Wall Outlet seal and insulation protector must both be sustainably and securely installed, mechanically fastened together as one, due to piping vibration, and shall be assembled without the use of adhesives or adhesive tapes as per Energy code requirements. **Wall Outlet shall be rated UL F and be tested and meet the following testing: ASTM E 331 (Water Penetration), ASTM E 283 (Air Leakage), ASTM E 2178 - Air Permeance of Building Materials, and Protector shall meet ASTM G153 , ASTM E96, ASTM E84 / UL 723 Class A.**



TGS MODEL



TRS MODEL



TSS MODEL

TITAN OUTLET MODEL NUMBERS

COLOR OPTIONS
GRAY - G WHITE - W

TGS MODELS

Stucco, Masonry Applications

Model #	Suction Line Insulated	Both Lines Insulated (Mini Splits - Heat Pumps)	Diameter	
TGS-550-G	(Fits: 1/2" wall thickness with 5/8", 3/4", 7/8" tube)	3/8" Wall Insulation Thickness	1.70" (4cm)	☐
TGS-575-G	(Fits: 3/4" wall thickness with 5/8", 3/4", 7/8" tube)	1/2" Wall Insulation Thickness	2.38" (6cm)	☐
TGS-510-G	(Fits: 1" wall thickness with 3/4", 7/8" tube or 3/4" wall thickness pipe insulation with 1-1/8" tube)	3/4" Wall Insulation Thickness	3.19" (8cm)	☐

TGS 3/4" GASKET

TGS-550-G-34	(Fits: 1/2" wall thickness with 5/8", 3/4", 7/8" tube)	3/8" Wall Insulation Thickness	1.70" (4cm)	☐
TGS-575-G-34	(Fits: 3/4" wall thickness with 5/8", 3/4", 7/8" tube)	1/2" Wall Insulation Thickness	2.38" (6cm)	☐
TGS-510-G-34	(Fits: 1" wall thickness with 5/8", 3/4", 7/8" tube or 3/4" wall thickness pipe insulation with 1-1/8" tube)	3/4" Wall Insulation Thickness	3.19" (8cm)	☐

TRS MODELS

Stucco, Masonry Applications

Model #	Suction Line Insulated	Both Lines Insulated (Mini Splits - Heat Pumps)	Diameter	
TRS-550-G	(Fits: 1/2" wall thickness with 5/8", 3/4", 7/8" tube)	3/8" Wall Insulation Thickness	1.70" (4cm)	☐
TRS-575-G	(Fits: 3/4" wall thickness with 5/8", 3/4", 7/8" tube)	1/2" Wall Insulation Thickness	2.38" (6cm)	☐
TRS-510-G	(Fits: 1" wall thickness with 3/4", 7/8" tube or 3/4" wall thickness pipe insulation with 1-1/8" tube)	3/4" Wall Insulation Thickness	3.19" (8cm)	☐

TRS 3/4" GASKET

TRS-550-G-34	(Fits: 1/2" wall thickness with 5/8", 3/4", 7/8" tube)	3/8" Wall Insulation Thickness	1.70" (4cm)	☐
TRS-575-G-34	(Fits: 3/4" wall thickness with 5/8", 3/4", 7/8" tube)	1/2" Wall Insulation Thickness	2.38" (6cm)	☐
TRS-510-G-34	(Fits: 1" wall thickness with 5/8", 3/4", 7/8" tube or 3/4" wall thickness pipe insulation with 1-1/8" tube)	3/4" Wall Insulation Thickness	3.19" (8cm)	☐

TSS MODELS

Siding, Stucco, Flat Wall, Compact Installation Design

Model #	Suction Line Insulated	Both Lines Insulated (Mini Splits - Heat Pumps)	Diameter	
TSS-550-G	(Fits: 1/2" wall thickness with 5/8", 3/4", 7/8" tube)	3/8" Wall Insulation Thickness	1.70" (4cm)	☐
TSS-575-G	(Fits: 3/4" wall thickness with 5/8", 3/4", 7/8" tube or 1/2" wall thickness pipe insulation with 1-1/8" tube)	1/2" Wall Insulation Thickness	2.38" (6cm)	☐

Shown above are part numbers for Gray.To order in White, Substitute G with W.

72170 Dunham Way, Suite D | Thousand Palms, CA 92276 | 760.343.2277 | www.AirexMfg.com

To download CAD & REVIT files; Please visit https://www.airexmfg.com/cad-library/

AIREX Manufacturing Inc.

DynaTrol® I-XL Hybrid

One-Part, Non-Staining, Non-Yellowing Sealant

PECORA CORPORATION

SPECIFICATION DATA SHEET

BASIC USES

- Exterior and interior caulking of door and window perimeters
- Expansion and control joints
- Coping and coping to facade joints
- Cornice and wash joints
- Pre-cast tilt-up panels
- EIFS and architectural panels
- Underside of precast planks
- Top of non-load bearing walls
- Fiber cement siding
- Liquid flashing and joint filler for use with the Pecora air barrier systems
- As a component of UL fire-rated joint systems
- Concrete joint applications requiring jet fuel resistance.

Suited for various manufacturing uses:

- Production of travel trailers and mobile homes
- Extruded PVC window and doors
- Seam sealer and adhesive for automotive and other OEM manufacturing applications.

MANUFACTURER

PECORA CORPORATION
165 Wambold Road
Harleysville, PA 19438
(P) 800.523.6688
(F) 215.721.0286
www.pecora.com

PRODUCT DESCRIPTION

Dynatrol I-XL Hybrid is based on a unique hybrid STPU (silyl-terminated polyurethane) chemistry that allows for a low odor, non-staining, non-yellowing, one-part, moisture cure, gun grade, isocyanate free sealant. It has been developed specifically for sealing dynamic joints between dissimilar materials, of varying coefficients of expansion and contraction on both porous and non-porous surfaces. It cures to a low modulus rubber with extraordinary adhesion, capable of accommodating joint movement of ±50% of the original joint width. It does not yellow, crack or craze on long term exposure to UV light.

Advantages:

- AAMA compliant for use as exterior perimeter sealing compound
- Non-Staining
- Non-Yellowing
- Paintable
- Isocyanate free
- Fire-rated
- Exceptional adhesion
- Moisture tolerant
- Low VOC
- No shrinkage
- Minimal dirt pick-up
- Low odor
- Non-gassing
- Long life
- Fast Cure
- Adhesion to green concrete
- Jet fuel resistant

Paintability:

Dynatrol® I-XL Hybrid may be painted with a high quality moisture permeable coating once a tough skin has developed (30-60 minutes). Dynatrol® I-XL Hybrid will require a full cure (7 days) before application of a non-permeable paint or coating. All paints and coatings should be tested for compatibility and adhesion before application over Dynatrol® I-XL Hybrid.

Fire Rated Systems:

Three-hour fire and temperature rated wall-to-wall, floor-to-floor and head-of-wall UL joint systems up to 3.5" (89mm) wide can be designed with mineral wool fire safing insulation. These designs have been full-scale tested and classified by Underwriter's Laboratories, Inc. (UL) and appear in the UL Fire Resistance Directory.

Ref: "Standard Methods of Tests of Fire Resistance of Building Construction and Materials" ASTM E119 and UL 263. Consult Pecora Technical Bulletin #85 for complete listing of Pecora Firestop Systems.

Limitations:

Sealant should not be used:

- When in direct contact with substrates that contain asphaltic or bituminous compounds
- For structural glazing
- For use in water immersion applications contact Technical Service.
- Under urethane coatings prior to full cure.
- For glazing applications contact Technical Service.

PACKAGING

- 10.1 oz. (300 mL) cartridges
- 20 oz. (591 mL) sausages

COLORS

- Tru-White, Black, Anodized Aluminum, Precast, Aluminum Stone, Limestone, Classic Bronze, EIFS Tan, Sequoia, Window Tan
- Additional custom colors available in batch quantities. Contact your Pecora Rep for additional details.

TABLE 1: TYPICAL UNCURED PROPERTIES AT 75°F (24°C), 50% RH

Test Property	Value	Test Procedure
Cure Time 1/8" Bead (Hours)	24	Pecora Corporation
Extrusion Rate @ 30PSI, 1/8" Orifice (Gms./Min.)	51	ASTM D2202
Sag (Inch)	0.05	ASTM D2202
Tack-Free Time (Hours)	2.5 - 3	ASTM C679
Tooling Time (Min.)	30	Pecora Corporation
Viscosity, #7 @ 10 RPM (Cps.)	300,000	ASTM D2196
VOC (g/L)	18	ASTM D3960
VOC Emissions (TVOC)	<2 ug (0.002 mg)/cu m	CDPH v1.1-2010

TABLE 2: TYPICAL CURED PROPERTIES AT 75°F (24°C), 50% RH

Test Property	Value	Test Procedure
Bond Durability - Class 50	Pass	ASTM C719
Elongation at Break (%)	1,400	ASTM D412
Hardness, Shore A	27	ASTM D412
Peel Adhesion to (Pli; % Cohesive)		
Aluminum (Unprimed)	30; 100	ASTM C794
Concrete (Unprimed)	30; 100	ASTM C794
Glass (Unprimed)	30; 100	ASTM C794
Bond to Concrete:*		
Non-Immersed	Pass, no bond loss	Fed. Spec. SS-S-200E
Immersed	Pass, no bond loss	Fed. Spec. SS-S-200E
Fuel-Immersed	Pass, no bond loss	Fed. Spec. SS-S-200E
Tensile Strength @ 100% Elongation (PSI)	35	ASTM D412
Tensile Strength, Ultimate (PSI)	180	ASTM D412
Service Temperature (°F)	-40 to 195	Pecora Corporation
Staining of Porous Substrates (White Marble)	Pass	ASTM C1248
Tensile Adhesion Properties		
Ultimate Tensile Strength (PSI)	140	ASTM C1135
Ultimate Elongation (%)	605	ASTM C1135

* Modified for single component curing system. P-200 or P-225 primer required.

DynaTrol® I-XL Hybrid

SPECIFICATION DATA SHEET

TECHNICAL DATA

Applicable Standards: Meets or exceeds the requirements of TT-S-00230C Type II, Class A, SS-S-200E (Modified); ASTM C-920, Type S, Grade NS, Class 50, Use NT, T1, G, M, A and O, AAMA 808.3 Type I. Sealant complies with appropriate USDA requirements for use in Federally inspected meat and poultry plants. Consult Typical Properties Chart for specific testing properties.

INSTALLATION

Joint Design: Proper sealant dimensions are critical when installing elastomeric joint sealants. Generally, a sealant width-to-depth ratio of 2:1 is recommended. Dynamic joint conditions will require a minimum 1/4" width and 3/16" depth in order to maintain the sealant's movement capabilities. For joints greater that 1" wide, please consult Technical Service.

Surface Preparations: Joints to receive sealant must be sound, smooth, uniform in dimensions and free from defects and foreign materials. They must also be clean, dry, free of frost and all contaminants, such as curing, compounds, sealers, waterproofing, coatings, etc.

Priming: Dynatrol® I-XL Hybrid has excellent adhesion to most common substrate materials. In some applications it may be necessary to use a primer. For porous surfaces Pecora P-150 or Pecora P-225 is recommended. For non-porous surfaces Pecora P-120 is recommended. For specific questions regarding primer use, please consult Technical Services.

Joint Backing: Backer rod controls the depth of the sealant and allows it to be applied under pressure. Use a size that will compress 25%. Denver Foam open-cell polyurethane or reticulated (soft) polyethylene rod is recommended. Closed-cell polyethylene may be used but care must be taken not to puncture the rod which can cause outgassing or bubbling/ blistering in the sealant. In joints too shallow for backer rod, use a polyethylene bond-breaker tape to prevent three-sided adhesion.

Application: Joints should be masked to ensure a neat appearance. Sealant should be applied in a continuous operation using sufficient pressure to fill the joint and make complete contact to the joint sides. Tool the sealant slightly concave using dry tooling techniques.

Tool Time (Initial Skin): 30 minutes at 77˚ (25˚C); 50% relative humidity. Higher temperatures and/or humidity will shorten this time. Lower temperatures and/or humidity will lengthen this time.
Cleaning: Immediately remove all excess sealant and smears adjacent to joints with mineral spirits. For equipment cleanup, use iso-propyl alcohol or mineral spirits. Consult manufacturer's SDS for handling and safety precautions.

Shelf Life: Twelve months when stored in original, unopened container in a dry area at temperatures below 80˚F.

Precautions: Use sealant in well ventilated areas. Keep away from heat and flame. Do not take internally. Call a physician if swallowed. Avoid eye and skin contact. For additional health and safety information, consult manufacturer's SDS.

FOR PROFESSIONAL USE ONLY.
KEEP OUT OF THE REACH OF CHILDREN.

AVAILABILITY & COST

Pecora products are available from stocking distributors nationwide. For the name and telephone number of your nearest representative, call the number below or visit our website at www.pecora.com.

WARRANTY

Pecora Corporation warrants its products to be free of defects. Under this warranty, we will provide, at no charge, replacement materials for, or refund the purchase price of, any product proven to be defective when used in strict accordance with our published recommendations and in applications considered by us as suitable for this product. The determination of eligibility for this warranty, or the choice of remedy available under this warranty, shall be made in our sole discretion and any decisions made by Pecora Corporation shall be final. This warranty is in lieu of any and all other warranties, expressed or implied, including but not limited to a warranty of merchantability or fitness for a particular purpose and in no case will Pecora be liable for damages other than those expressly stated in this warranty, including but not limited to incidental or consequential damages.

MAINTENANCE

If the sealant is damaged and the bond is intact, cut out the damaged area and recaulk. No primer is required. If the bond has been affected, remove the sealant, clean and prepare the joint in accordance with the instructions under "INSTALLATION."

TECHNICAL SERVICES

Pecora representatives are available to assist you in selecting an appropriate product and to provide on-site application instructions or to conduct jobsite inspections.

For further assistance call our Technical Service Department at 800-523-6688.

FILING SYSTEMS

- CSI MasterFormat Designation - 07 92 00: Joint Sealants

Since Pecora Architectural Sealants are applied to varied substrates under diverse environmental conditions and construction situations it is recommended that substrate testing be conducted prior to application.

Pecora is a member of and supports: SWRI, CSI, AIA, ICRI, ABAA, USGBC, IPI.
Pecora products are proudly made in America.

165 Wambold Road, Harleysville, PA 19438 | 800.523.6688 | pecora.com

PECORA SEALANTS

Job Name:	
Tag#	

Submittal Data Sheet

2MXL18QMVJU

2 Port, 1.5-Ton Outdoor Heat Pump

Efficiency

	SEER	EER	HSPF	COP
Non-Ducted	17	12.7	10.3	3.33
Ducted	14	10.1	8.2	3.14
Mixed	15.5	11.4	9.25	3.24

Performance

Cooling (Btu/hr)	
Rated	18,000
Operating Range	14°F – 115°F

Rated Cooling Conditions: Indoor: 80°F DB/67°F WB
Outdoor: 95°F DB/75°F WB

Heating (Btu/hr)	
Rated	18,900
Operating Range	-13°F – 60°F

Rated Heating Conditions: Indoor: 70°F DB/60°F WB
Outdoor: 47°F DB/43°F WB

* 12 YEAR PARTS LIMITED WARRANTY

Complete warranty details available from your local dealer or at www.daikincomfort.com. To receive the 12-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec. *If product is installed in a commercial application, limited warranty period is 5 years.*

Electrical

	208/60/1	230/60/1
System MCA	17.1	17.1
System MFA	20	20
Compressor RLA	15.5	15.5
Outdoor fan motor FLA	.33	.33
Outdoor fan motor W	51	51

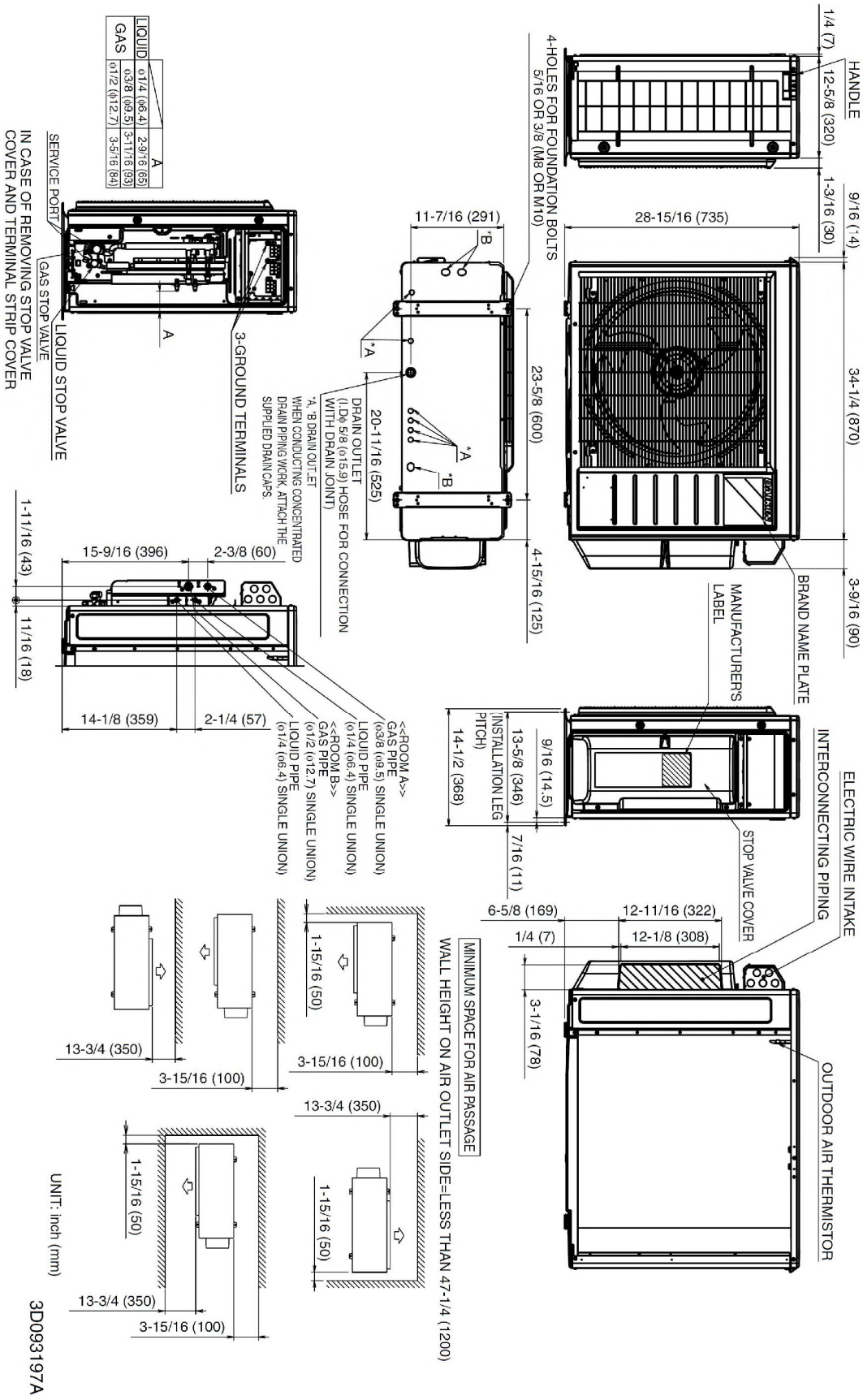
MFA: Max. fuse amps **MCA**: Min. circuit amps (A) **FLA**: Full load amps (A)
RLA: Rated load amps (A) **W**: Fan motor rated output (W)

Outdoor Specifications

Compressor	Hermetically Sealed Swing Type			
Refrigerant	R-410A			
Factory Charge (Lbs)	6.17			
Refrigerant Oil	PVE (FVC50K)			
Airflow Rate (cfm)	**Cooling**		**Heating**	
	H	2,150	**H**	1,963
	M	2,150	**M**	1,963
	L	1,949	**L**	1,006
Sound Pressure Level (dBA)	50 / 51			
Dimensions (H × W × D) (in)	28-15/16 × 34-1/4 × 12-5/8			
Weight (Lbs)	139			

Piping

Liquid (in)	¼ x 2
Gas (in)	3/8 x 1, ½ x 1
Drain (in)	5/8
Max. System Piping Length (ft)	164
Max. Interunit Piping Length (ft)	82
Max. Height Difference – IDU to ODU (ft)	49.25
Max. Height Difference – IDU to IDU (ft)	24.625
Chargeless (ft)	98.4
Additional Charge of Refrigerant (oz/ft)	.21


1/4 (7)
HANDLE
12-5/8 (320)
1-3/16 (30)
9/16 (14)
4-HOLES FOR FOUNDATION BOLTS 5/16 OR 3/8 (M8 OR M10)
28-15/16 (735)
11-7/16 (291)
*B
*A
23-5/8 (600)
20-11/16 (525)
DRAIN OUTLET (I.D ø 5/8 (ø15.9) HOSE FOR CONNECTION WITH DRAIN JOINT)
*A, *B DRAIN OUTLET WHEN CONDUCTING CONCENTRATED DRAIN PIPING WORK, ATTACH THE SUPPLIED DRAIN CAPS.
4-15/16 (125)
34-1/4 (870)
3-9/16 (90)
BRAND NAME PLATE
MANUFACTURER'S LABEL
LIQUID
GAS
ø1/2 (ø12.7)
3-5/16 (84)
ø1/4 (ø6.4)
ø3/8 (ø9.5)
3-11/16 (93)
2-9/16 (65)
A
SERVICE PORT
GAS STOP VALVE
LIQUID STOP VALVE
IN CASE OF REMOVING STOP VALVE COVER AND TERMINAL STRIP COVER
3-GROUND TERMINALS
15-9/16 (396)
2-3/8 (60)
1-11/16 (43)
11/16 (18)
14-1/8 (359)
2-1/4 (57)
<<ROOM A>>
GAS PIPE (ø3/8 (ø9.5) SINGLE UNION)
LIQUID PIPE (ø1/4 (ø6.4) SINGLE UNION)
<<ROOM B>>
GAS PIPE (ø1/2 (ø12.7) SINGLE UNION)
LIQUID PIPE (ø1/4 (ø6.4) SINGLE UNION)
14-1/2 (368)
13-5/8 (346)
[INSTALLATION LEG PITCH]
9/16 (14.5)
7/16 (11)
6-5/8 (169)
12-11/16 (322)
1/4 (7)
12-1/8 (308)
3-1/16 (78)
STOP VALVE COVER
ELECTRIC WIRE INTAKE
INTERCONNECTING PIPING
OUTDOOR AIR THERMISTOR
MINIMUM SPACE FOR AIR PASSAGE
WALL HEIGHT ON AIR OUTLET SIDE=LESS THAN 47-1/4 (1200)
1-15/16 (50)
13-3/4 (350)
3-15/16 (100)
UNIT: inch (mm)
3D093197A

Included	Part Number	Description
	DACA-WB-3	Mounting Bracket
	KEH063A4E	Drain Pan Heater 2/3/4MXS & 2/3MXL
	KPW063A4	Air Adjustment Grille
	KKG063A42	Back protection wire net
	KKG063A43	Side protection wire net
	KPS063A41	Snow hood (intake side plate)
	KPS063A44	Snow hood (intake rear plate)
	KPS063A47	Snow hood (outlet)

Non-Ducted, 60 Hz, 208-230V

	Cooling Capacity of each indoor unit Heating Capacity of each indoor unit					
Combination of indoor unit	Each Capacity				Total Indoor Unit Capacity	
	A room	B room	C room	D room	Rating	(min ~ max)
07	7.00	—	—	—	7.00	6.90 ~ 9.30
	8.80	—	—	—	8.80	7.50 ~ 14.00
09	9.00	—	—	—	9.00	7.40 ~ 12.00
	11.30	—	—	—	11.30	7.50 ~ 18.00
12	12.00	—	—	—	12.00	7.50 ~ 16.00
	15.00	—	—	—	15.00	7.50 ~ 24.00
15	15.00	—	—	—	15.00	8.90 ~ 20.00
	18.80	—	—	—	18.80	7.70 ~ 30.00
07+07	7.00	7.00	—	—	14.00	8.90 ~ 18.70
	8.75	8.75	—	—	17.50	7.70 ~ 28.00
07+09	7.00	9.00	—	—	16.00	8.90 ~ 21.30
	8.23	10.58	—	—	18.80	7.70 ~ 32.00
07+12	6.63	11.37	—	—	18.00	9.00 ~ 24.00
	6.96	11.94	—	—	18.90	7.70 ~ 35.90
07+15	5.73	12.27	—	—	18.00	10.00 ~ 24.00
	6.01	12.89	—	—	18.90	7.80 ~ 36.00
09+09	9.00	9.00	—	—	18.00	9.00 ~ 24.00
	9.45	9.45	—	—	18.90	7.70 ~ 36.00
09+12	7.71	10.29	—	—	18.00	9.10 ~ 24.00
	8.10	10.80	—	—	18.90	7.80 ~ 36.00
09+15	6.75	11.25	—	—	18.00	10.10 ~ 24.00
	7.09	11.81	—	—	18.90	7.80 ~ 36.00
12+12	9.00	9.00	—	—	18.00	9.20 ~ 24.00
	9.45	9.45	—	—	18.90	7.80 ~ 36.00

Ducted, 60 Hz, 208-230V

Combination of indoor unit	Cooling Capacity of each indoor unit Heating Capacity of each indoor unit					
	Each Capacity				Total Indoor Unit Capacity	
	A room	B room	C room	D room	Rating	(min ~ max)
09	9.00	—	—	—	9.00	7.30 ~ 9.10
	10.70	—	—	—	10.70	7.40 ~ 12.50
12	12.00	—	—	—	12.00	7.30 ~ 12.10
	14.30	—	—	—	14.30	7.40 ~ 16.70
15	15.00	—	—	—	15.00	8.10 ~ 16.60
	16.60	—	—	—	16.60	7.50 ~ 20.80
09+09	9.00	9.00	—	—	18.00	8.80 ~ 21.00
	9.45	9.45	—	—	18.90	7.60 ~ 25.00
09+12	7.71	10.28	—	—	18.00	8.80 ~ 21.00
	8.10	10.79	—	—	18.90	7.60 ~ 28.00
09+15	6.75	11.25	—	—	18.00	11.70 ~ 21.00
	7.09	11.81	—	—	18.90	7.70 ~ 31.00
12+12	9.00	9.00	—	—	18.00	8.80 ~ 21.00
	9.45	9.45	—	—	18.90	7.60 ~ 31.00

MINUTES OF THE 2025 ANNUAL MEETING OF OWNERS OF VILLA COSTELLA CONDOMINIUM ASSOCIATION

DATE/LOCATION: **March 26, 2025 via video conference**

START TIME: **7:07 PM**

END TIME: **7:40 PM**

OWNER ATTENDANCE: Elizabeth Friesen, Peggy Gray, Connie McCrery, Brent Siewert, Victoria Hawker, Russel Raade, Anamaria Lloyd by proxy, Janet Burton, Darrell Stone, Candace Carlson, Delaney Simmons by proxy, Christen Brooke, Susan Peters, John Bailey, David Ward, Marcia Johnson by proxy, Drew Natuk and Paula Gottlob.

OTHERS PRESENT: Maebelyn Ampoan, on behalf of Associa (EMB Mgmt. Co.)

MINUTES PREPARED BY: Connie McCrery, Secretary

Call to order, Confirmation of Quorum and Proof of Notice

The annual meeting of the Owners of the Villa Costella Condominium Association (the Association") was called to order by Ms. Friesen, presiding as President, at 7:07 P.M. A quorum of 83.22% of ownership and proof of notice requirements were met and confirmed. Proof of Notification of Meeting was provided.

Review and Approval of Minutes from the 2024 Annual Meeting: these were approved by the Association.

PRESIDENT'S REPORT:

We were [redacted]

TREASURER'S REPORT:

Current Operating account balance = [redacted]
Current Reserve account balance = [redacted]

[redacted]

Old Business: [redacted]

New Business:

[redacted]

Proposed new House Rules:

[redacted]

Proposal: Allow owners to install ductless heating/air conditioning under strict guidelines and with approval of the Board for design and installation.

Why: Owners are requesting the option to add air conditioning to deal with rising temperatures and increased smoke risk in summer

Window units are prohibited in House rules due to noise and safety concerns

Owners are looking for a more efficient heat source

The City of Seattle will be issuing a requirement for buildings over 20,000 square feet to report how they are reducing energy consumption.

Status: We have received feedback from Seattle Landmark Preservation Board on ductless A/C, requiring additional drawings.

Vote – Election of one new Director:

[redacted]

Vote – Allowance of Individual Owners to install ductless air-conditioning/heating systems at owner's expense and in accordance with established guidelines and prior approval of the Board.
The item passed with 72.02% owner approval.

Open forum:

With no further HOA business, the Board adjourned at 7:40 p.m.

Respectfully submitted by Connie McCrery, Secretary

Appended report:
Repair log for month of February, 2025