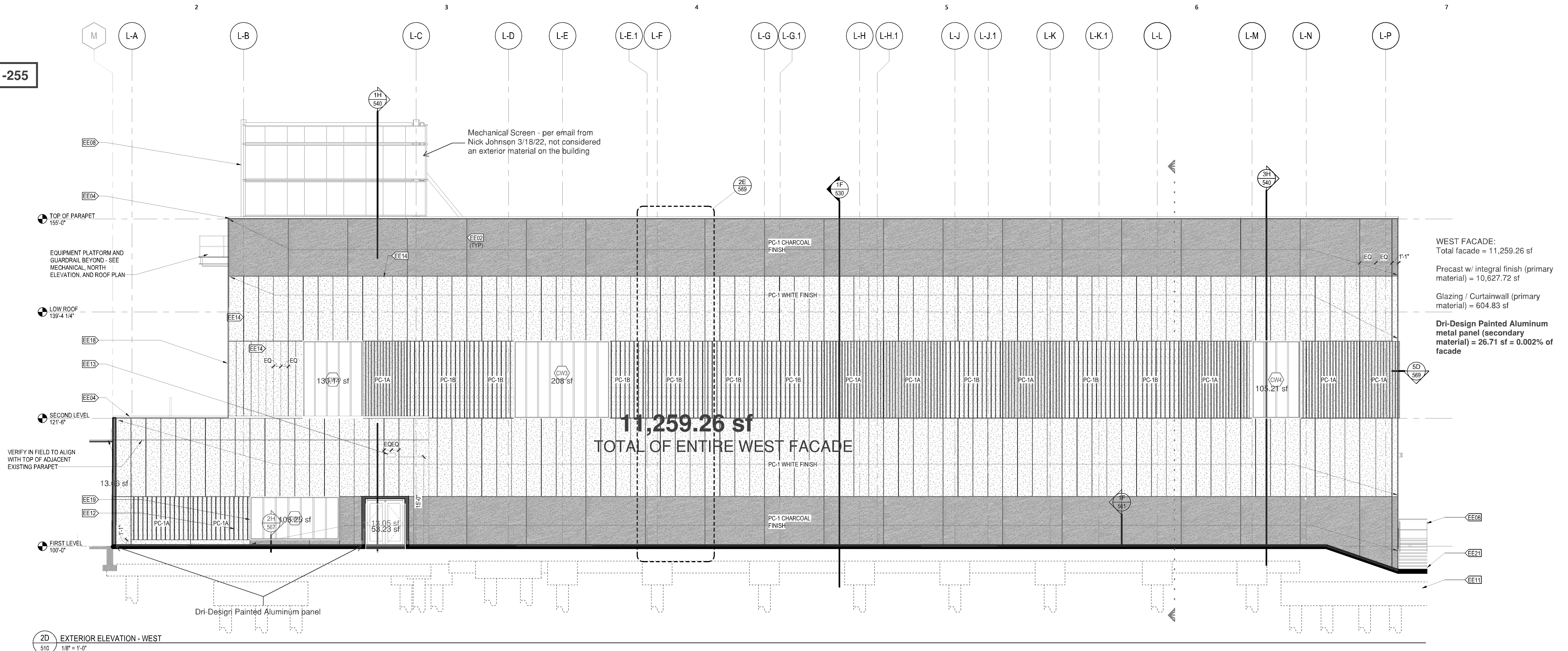
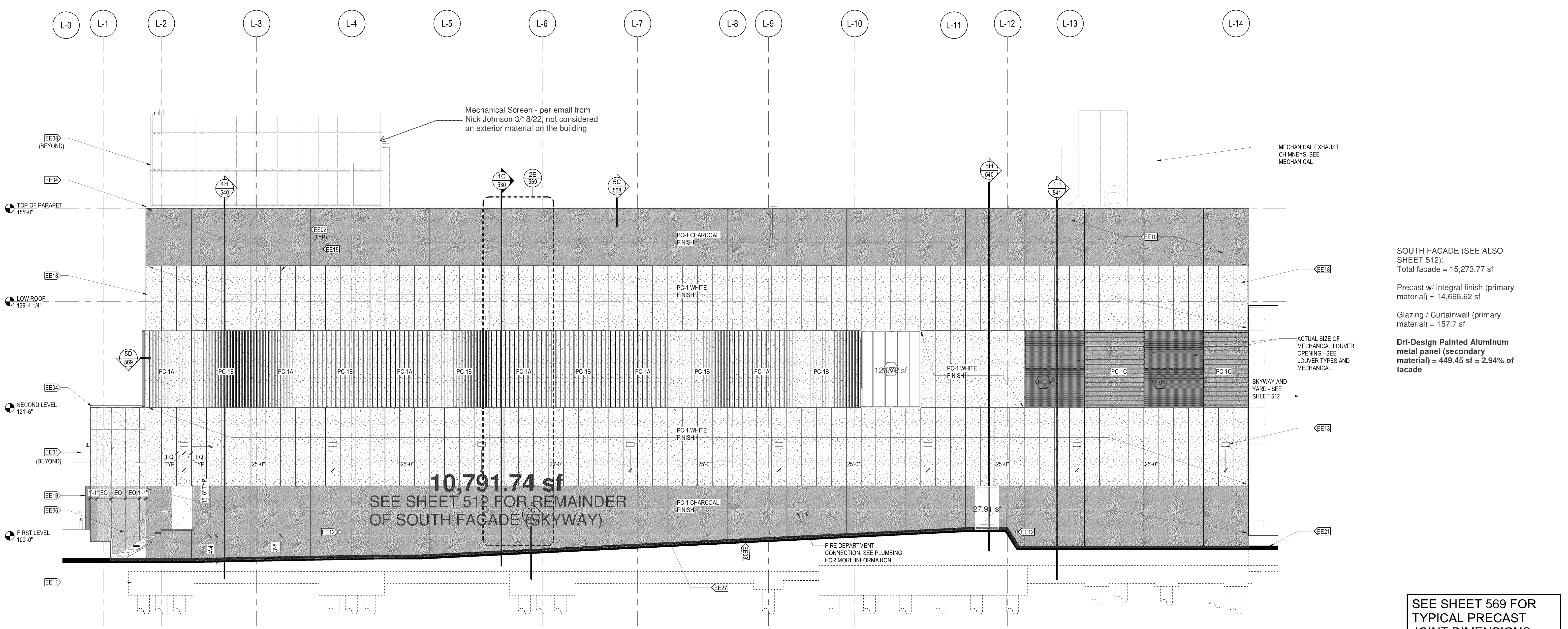


CASE #PL2021-255



2D EXTERIOR ELEVATION - WEST
1/8" = 1'-0"



2H EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"

SOUTH FACADE (SEE ALSO SHEET 512):
Total facade = 15,273.77 sf
Precast w/ integral finish (primary material) = 14,666.62 sf
Glazing / Curtainwall (primary material) = 157.7 sf
Dri-Design Painted Aluminum metal panel (secondary material) = 449.45 sf = 2.94% of facade

SEE SHEET 569 FOR
TYPICAL PRECAST
JOINT DIMENSIONS
AND PATTERNS
SEE SHEET 150 FOR
KEYNOTES, SYMBOLS
LEGEND & NOTES

CASE #PL2021-255



SEAGATE
TECHNOLOGY -
NORMANDALE
WAFER SOUTH
ADDITION

B | W | B | R

380 St. Peter Street, Ste. 600
Saint Paul, MN 55102
651.222.3701
bwbr.com

Consultants

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I hereby certify that this plan, specification or report was prepared by me or under the direct supervision and for the sole use of a Licensed Architect under the laws of the State of Minnesota.

Name *David J. Hirsch*
Date *01/10/2022*
Licensure No. 23874

Issued For
Item Date
CITY SUBMITTAL 12/08/2021
CITY RESUBMITTAL 01/10/2022
BP-02 + BP-03 DO ISSUE 02/08/2022
BP-02 CD ISSUE 03/08/2022

This Sheet may be a Reduced Copy.
The bar above is 1" long on a Full Size Sheet.
Drawing Scales apply to Full Size Sheets.

Keyplan

Comm. No. 3.2021141.00
Sheet Title
EXTERIOR ELEVATIONS

Sheet No.

511

Geographix

EAST FACADE (SEE ALSO SHEET 512):
Total facade = 9,566.18 sf

Precast w/ integral finish (primary material) = 8,148.83 sf

Glazing / Curtainwall (primary material) = 79.62 sf

Pac-Clad Snap-Clad metal panel (primary material w/ 30-year finish warranty) = 1,095.81 sf

Dri-Design Painted Aluminum metal panel (secondary material) = 241.92 sf = 2.53% of facade

414.91 sf

8,429.51 sf
SEE SHEET 512 FOR REMAINDER OF EAST FACADE (SKYWAY)

5,397.28 sf
SEE SHEET 512 FOR REMAINDER OF NORTH FACADE (SKYWAY)

NORTHEAST FACADE:
Total facade = 1,922.97 sf
Precast w/ integral finish (primary material) = 1,681.53 sf
Glazing / Curtainwall (primary material) = 241.44 sf

1,922.97 sf
TOTAL OF ENTIRE NE FACADE

NORTH FACADE (SEE ALSO SHEET 512):
Total facade = 9,516.48 sf

Precast w/ integral finish (primary material) = 4,436.44 sf

Glazing / Curtainwall (primary material) = 203.4 sf

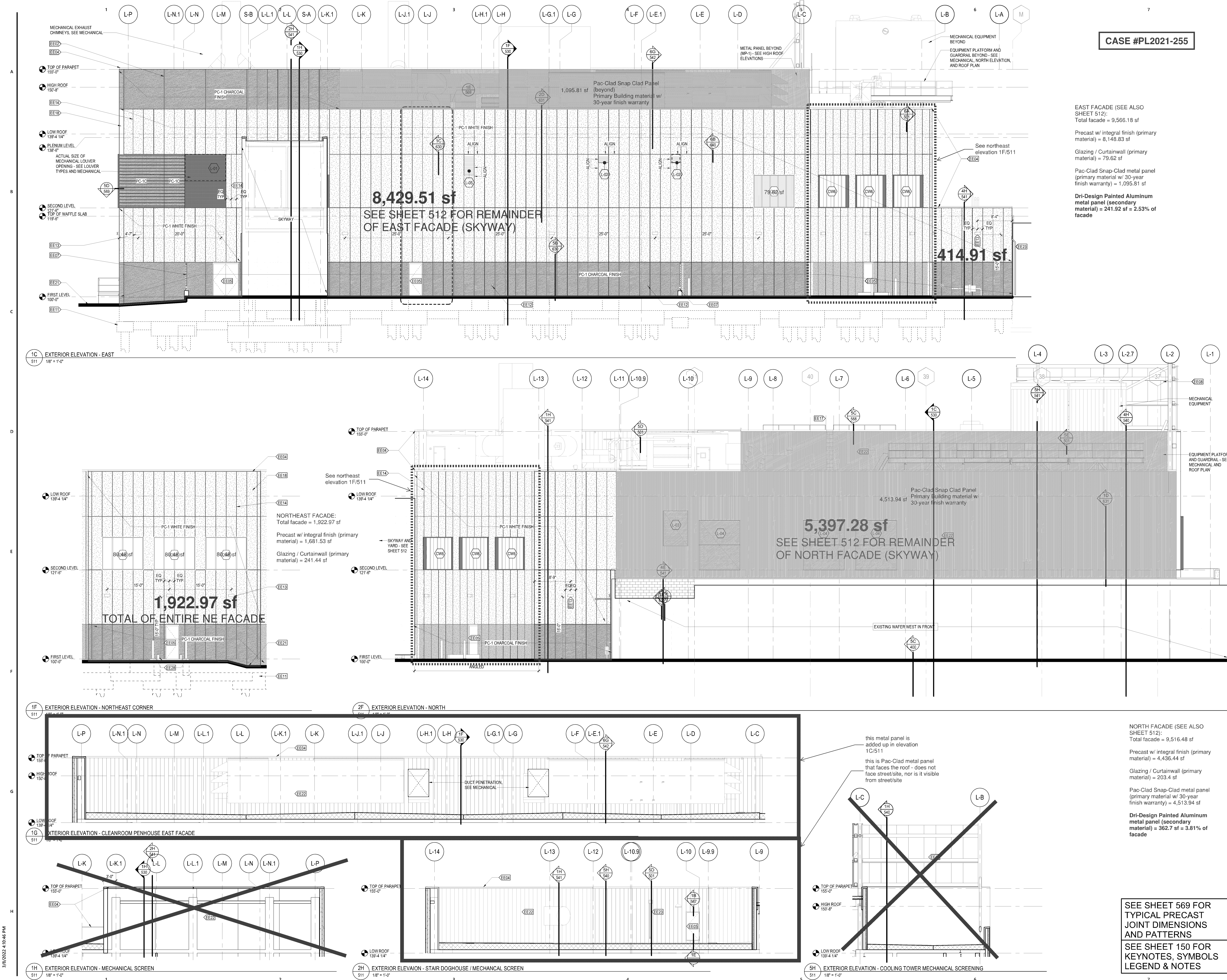
Pac-Clad Snap-Clad metal panel (primary material w/ 30-year finish warranty) = 4,513.94 sf

Dri-Design Painted Aluminum metal panel (secondary material) = 362.7 sf = 3.81% of facade

SEE SHEET 569 FOR
TYPICAL PRECAST
JOINT DIMENSIONS
AND PATTERNS

SEE SHEET 150 FOR
KEYNOTES, SYMBOLS
LEGEND & NOTES

this metal panel is added up in elevation 1C/511
this is Pac-Clad metal panel that faces the roof - does not face street/site, nor is it visible from street/site



3/8/2022 4:10:46 PM

CASE #PL2021-255

SEE SHEET 510 FOR REMAINDER
OF SOUTH FACADE (MAIN
BUILDING) AND FOR SF TOTALS

1,482.03 sf

176.47 sf

3,942.73 sf

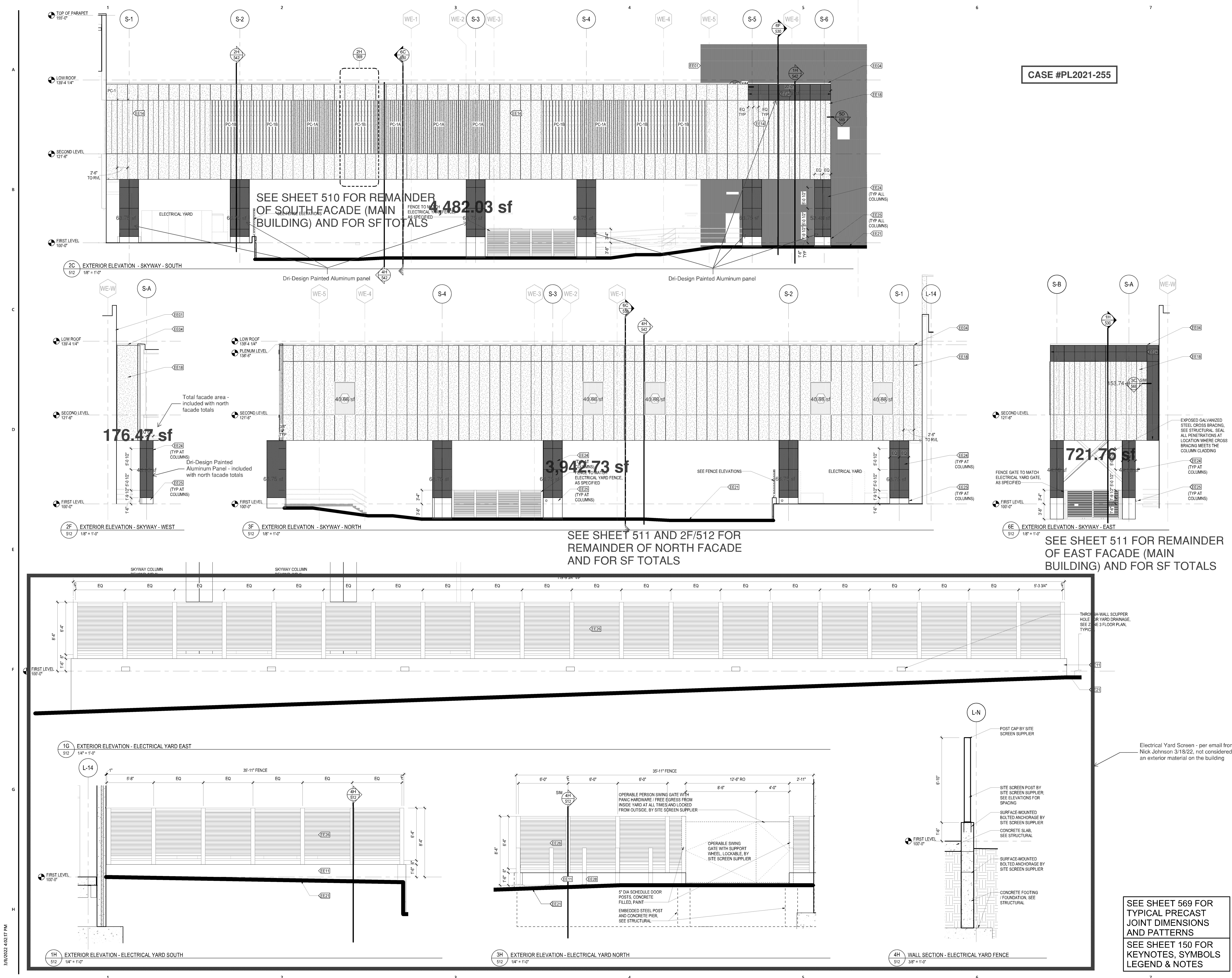
SEE SHEET 511 AND 2F/512 FOR
REMAINDER OF NORTH FACADE
AND FOR SF TOTALS

721.76 sf

SEE SHEET 511 FOR REMAINDER
OF EAST FACADE (MAIN
BUILDING) AND FOR SF TOTALS

Electrical Yard Screen - per email from
Nick Johnson 3/18/22, not considered
an exterior material on the building

SEE SHEET 569 FOR
TYPICAL PRECAST
JOINT DIMENSIONS
AND PATTERNS
SEE SHEET 150 FOR
KEYNOTES, SYMBOLS
LEGEND & NOTES



SECTION 03-4500 - PRECAST ARCHITECTURAL CONCRETE**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Architectural precast concrete wall panels.
- B. Architectural precast concrete accessories.
- C. Supports, anchors, and attachments.
- D. Grouting under panels.
- E. Specified finish for exposed surfaces shall extend to all faces that will be exposed to view when complete.
- F. Products and materials required for the envelope mock-up, as indicated on the Drawings.

1.02 RELATED REQUIREMENTS

- A. Section 07-6200 - Sheet Metal Flashing and Trim: Reglets recessed in units.
- B. Section 07-9200 - Joint Sealants: Sealing perimeter and intermediate joints.

1.03 REFERENCE STANDARDS

- A. ACI 301 - Specifications for Concrete Construction.
- B. ACI 318 - Building Code Requirements for Structural Concrete.
- C. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
- D. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength.
- E. ASTM A563 - Standard Specification for Carbon and Alloy Steel Nuts.
- F. ASTM A563M - Standard Specification for Carbon and Alloy Steel Nuts (Metric).
- G. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
- H. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete.
- I. ASTM C1602/C1602M - Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete.
- J. ASTM C33/C33M - Standard Specification for Concrete Aggregates.
- K. ASTM C150/C150M - Standard Specification for Portland Cement.
- L. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete.
- M. ASTM C330/C330M - Standard Specification for Lightweight Aggregates for Structural Concrete.
- N. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
- O. ASTM C979/C979M - Standard Specification for Pigments for Integrally Colored Concrete.
- P. AWS D1.1/D1.1M - Structural Welding Code - Steel.
- Q. PCI MNL-116 - Manual for Quality Control for Plants and Production of Structural Precast Concrete Products.
- R. PCI MNL-117 - Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products.
- S. PCI MNL-120 - PCI Design Handbook.
- T. PCI MNL-122 - Architectural Precast Concrete: Fully Revised Manual Including New Sections, Extensive Updates, and Detailed Specifications to Meet Today's Construction Needs..
- U. PCI MNL-123 - Connections Manual: Design and Typical Details of Connections for Precast and Prestressed Concrete.
- V. PCI MNL-135 - Tolerance Manual for Precast and Prestressed Concrete Construction.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene one week prior to commencing work of this section.

1.05 SUBMITTALS

- A. Product Data: Manufacturer's information on accessory products, including pigments, admixtures, inserts, plates, etc.

- B. Shop Drawings: Indicate layout, unit locations, configuration, unit identification marks, reinforcement, integral insulation, insulated panel system connectors, connection details, support items, location of lifting devices, dimensions, openings, and relationship to adjacent materials. Provide erection drawings.
 - 1. Include comprehensive engineering calculations, signed and sealed by the Professional Engineer responsible for its preparation who is registered in the State in which the project is located. Include all dead, live, wind, and other applicable loads used in the design. Indicate loading on shop drawings.
- C. Samples: Submit two minimum 1 inch thick panel, 6 inch by 6 inch in size, illustrating surface finish, color and texture.
- D. Fabricator's Qualification Statement: Provide documentation showing precast concrete fabricator is accredited under IAS AC157.
- E. Sustainable Design Reporting: If any fly ash, ground granulated blast furnace slag, silica fume, rice hull ash, or other waste material is used in mix designs to replace Portland cement, submit the total volume of concrete, mix design(s) used showing the quantity of Portland cement replaced, reports showing successful cylinder testing, and temperature on day of pour if cold weather mix is used.

1.06 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide precast concrete units and connections capable of withstanding design loads within limits and under conditions indicated on drawings.
 - 1. Loading Requirements: As indicated on the drawings and as dictated in accordance with ASCE 7-16

1.07 QUALITY ASSURANCE

- A. Design Engineer Qualifications: Design precast concrete units under direct supervision of a Professional Structural Engineer experienced in design of precast concrete and licensed in the State in which the Project is located.
- B. Fabricator Qualifications:
 - 1. Firm having at least 5 years of documented experience in production of precast concrete of the type required.
 - 2. Plant certification by one of the following.
 - a. Architectural Precast Association (APA).
 - b. Precast/Prestressed Concrete Institute (PCI), Group A1.
 - c. Approved inspection agency. Inspection shall be as required by PCI MNL-116; acceptance criteria shall be the same as Plant Certification Program.
- C. Welder Qualifications: Welding processes and welding operators qualified in accordance with AWS D1.1/D1.1M and no more than 12 months before start of scheduled welding work.
- D. Copies of Documents at Project Site: Maintain at the project site a copy of each referenced document that prescribes execution requirements.

1.08 MOCK-UP

- A. Provide for each combination of exposed precast wall panel finish a mock-up, minimum 4 feet long by 4 feet wide, with lifting device, and attachment points, and finish in accordance with approved sample.
 - 1. Each type of precast panel mock-up to include a typical vertical joint between two wall panels.
- B. Include one mock-up panel with typical window, fully glazed, sealants, insulation, and other items that will be built into the precast panel represented by each mock-up.
- C. Locate where directed.
- D. Retain mock-ups during construction as the standard for remaining precast work.
- E. Protect with weather resistant membrane.

1.09 DELIVERY, STORAGE, AND HANDLING

- A. Handling: Lift and support precast units only from support points.
- B. Blocking and Lateral Support During Transport and Storage: Use materials that are clean, non-staining, and non-harmful to exposed surfaces. Provide temporary lateral support to prevent bowing and warping.

- C. Protect units to prevent staining, chipping, or spalling of concrete.

1.10 WARRANTY

- A. The Precast Concrete Manufacturer shall guarantee the precast concrete products against defects in material and workmanship, for a period of thirty (30) years, from the date of purchase per City of Bloomington "Brick or Better" requirements. This guarantee covers castings used in the proper manner and installed and maintained by qualified personnel.

PART 2 PRODUCTS

2.01 PRECAST UNITS, GENERAL

- A. Precast Architectural Concrete Units: Comply with PCI MNL-120, PCI MNL-122, PCI MNL-123, PCI MNL-135, and ACI 318.
1. Concrete Face Mix: Minimum 5000 psi, 28 day strength, air entrained to 5 to 7 percent; comply with ACI 301.
 2. Design Loads: Static loads, anticipated dynamic loading, including positive and negative wind loads, thermal movement loads, and erection forces as defined by applicable code.
 3. Calculate structural properties of units in accordance with ACI 318.
 4. Other Cementitious Materials: Replace as much Portland cement as possible with fly ash, ground granulated blast furnace slag, silica fume, or rice hull ash as is consistent with strength and appearance requirements.
 5. Accommodate construction tolerances, deflection of building structural members, and clearances of intended openings.
 6. Provide connections that accommodate building movement and thermal movement and adjust to misalignment of structure without unit distortion or damage.
 7. Provide thicknesses as indicated on drawings - Exterior Wall Types.

2.02 PRECAST UNITS, FINISHES

- A. PC-1 Charcoal with clear sealer in the following patterns:
1. Smooth without reveals.
 2. Vertical reveals at spacing indicated on drawings.
 3. PC-1C Formliner C - Horizontal
- B. PC-1 White with the following patterns:
1. Vertical reveals at spacing indicated on drawings.
 2. PC-1A Formliner A - Vertical
 3. PC-1B Formliner B - Vertical
- C. Finish: Sandblast exposed surfaces to 100 percent of unit aggregate surface.

2.03 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
1. Deformed billet-steel bars.
- B. Steel Welded Wire Reinforcement (WWR): Deformed type ASTM A1064/A1064M.
1. Form: Flat Sheets.

2.04 CONCRETE MATERIALS

- A. Cement: ASTM C150/C150M, Type I - Normal or Type III - High Early Strength, Portland type.
- B. Other Cementitious Materials:
1. Fly Ash or Natural Pozzolans: Comply with ASTM C618.
- C. Fine and Coarse Structural Aggregates: ASTM C33/C33M.
- D. Lightweight Structural Aggregate: ASTM C330/C330M.
- E. Surface Finish Aggregate: Clean, washed natural gravel; conforming to ASTM C33.
- F. Color Additives: Pure, concentrated mineral pigments specifically intended for mixing into concrete and complying with ASTM C979/C979M.

- G. Mix for Charcoal Concrete: Gage Reference #0122-05
 - 1. Cement: Gray.
 - 2. Aggregate: Granite Falls Aggregate,
 - 3. Sand: Starlite Black Sand and Plate River Sand.
 - 4. Colorant: DCS Charcoal #620
 - 5. Finish: Light sandblast with clear sealer where indicated.
- H. Mix for White Concrete: Gage Reference #0122-04
 - 1. Cement: White.
 - 2. Aggregate: Fort Dodge 1/2"
 - 3. Sand: Maxi Mix Sand and Platte River Sand.
 - 4. Colorant: DCS White #1 color
 - 5. Finish: Light sandblast.
- I. Clear Sealer: TK-Bright Seal as manufactured by TK Products. Item No. TK-BRSEAL. www.tkproducts.com.
- J. Water: ASTM C1602/C1602M; clean, potable, and not detrimental to concrete.
- K. Air Entrainment Admixture: ASTM C260/C260M.
- L. Grout: Non-shrink, non-metallic, minimum [5,000] psi, 28 day strength.

2.05 FORM LINERS

- A. Manufacturers:
 - 1. Fitzgerald Formliners: www.formliners.com/#sle.
- B. Formliner A: As indicated on drawings.
- C. Formliner B: As indicated on drawings.
- D. Formliner C: As indicated on drawings.

2.06 SUPPORT DEVICES

- A. Connecting and Support Devices; Anchors and Inserts: <>.
 - 1. For site retaining and feature walls indicated on civil and landscape drawings: ASTM A666 Type 304 stainless steel.
 - 2. For precast attached to building and other locations: ASTM A36/A36M steel; hot-dip galvanized in accordance with ASTM A153/A153M.
 - a. Clean surfaces of rust, scale, grease, and foreign matter.
 - b. Prime paint in one coat, except surfaces in direct contact with concrete or requiring field welding.
- B. Bolts, Nuts, and Washers: ASTM A307 heavy hex bolts, Type A, hot-dip galvanized, with matching ASTM A563 (ASTM A563M) nuts and matching washers.
- C. Primer: Zinc rich type.

2.07 INSULATION

- A. Integral Insulation: Rigid polyisocyanurate (ISO) board insulation.
 - 1. Provide maximum insulation thickness of 3 inches.
 - 2. Connectors: Non-conducting connectors designed and manufactured for use in insulated composite panels.

2.08 ACCESSORIES

- A. Bearing Pads: High density plastic; Shore A Durometer as recommended by manufacturer; 1/8 inch thick, smooth both sides.
- B. Joint sealant: 2-part polyurethane, ASTM C920, Type M, Grade NS, Class 25.
- C. Joint sealant backer: Non-staining closed cell foam, size recommended by manufacturer for width of joint.

2.09 FABRICATION

- A. Fabricate in compliance with PCI MNL-117 and PCI MNL-135.
- B. Use rigid molds, constructed to maintain precast unit uniform in shape, size, and finish.
- C. Use form liners in accordance with manufacturer's instructions.

- D. Place thin brick in form liner in accordance with manufacturer's instructions. Mix bricks from several cartons for uniform distribution of color variations.
- E. Maintain consistent quality during manufacture.
- F. Fabricate connecting devices, plates, angles, items fit to steel framing members, inserts, bolts, and accessories. Fabricate to permit initial placement and final attachment.
- G. Locate hoisting devices to permit removal after erection.
- H. Cure units to develop concrete quality, and to minimize appearance blemishes such as non-uniformity, staining, or surface cracking.
- I. Minor patching in plant is acceptable, providing structural adequacy and appearance of units is not impaired.

2.10 FABRICATION TOLERANCES

- A. Comply with PCI MNL-117 and PCI MNL-135, except as specifically amended below.
 - 1. Maximum Variation From Nominal Face Dimensions: Plus or minus 3/32 in.
 - 2. Maximum Variation From Square or Designated Skew: Plus or minus 1/8 inch in 10 feet.
 - 3. Maximum Variation from Thickness: Plus or minus 1/8 in.
 - 4. Maximum Misalignment of Anchors, Inserts, Openings: Plus or minus 1/8 inch.
 - 5. Maximum Bowing of Members: Plus or minus length /360.

2.11 SOURCE QUALITY CONTROL

- A. Provide testing and analysis of concrete mix per PCI Plant Certification Procedures.

PART 3 EXECUTION**3.01 PREPARATION**

- A. Provide for erection procedures and induced loads during erection. Maintain temporary bracing in place until final support is provided.

3.02 ERECTION

- A. Erect units without damage to shape or finish. Replace or repair damaged panels.
- B. Erect units level and plumb within allowable tolerances.
- C. Align and maintain uniform horizontal and vertical joints as erection progresses.
- D. Weld units in place. Perform welding in accordance with AWS D1.1/D1.1M.
- E. Touch-up field welds and scratched or damaged primed painted surfaces.

3.03 TOLERANCES

- A. Erect members level and plumb within allowable tolerances. Conform to PCI MNL-135 .

END OF SECTION

SNAP-CLAD PANEL

MATERIALS

.032 aluminum

24 gauge steel

.040 aluminum

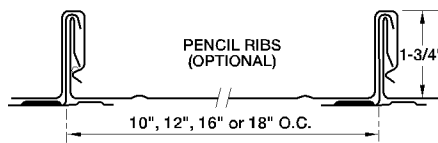
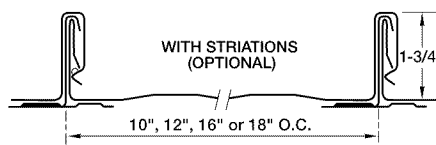
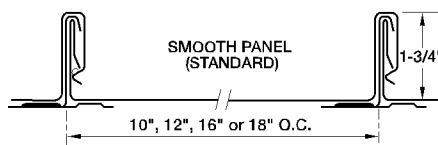
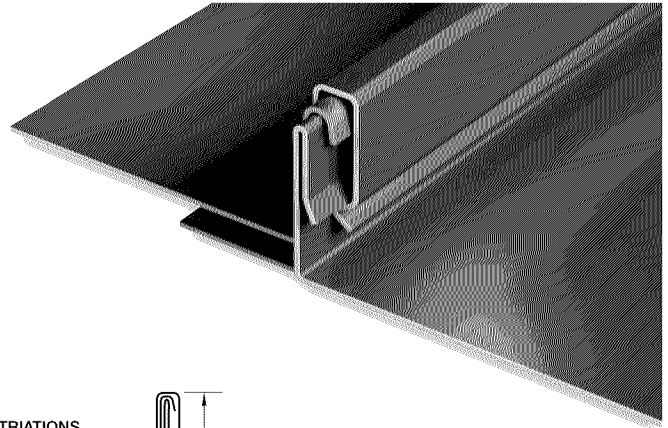
22 gauge steel

Per Peter Nagel on 3/25/2022

SPECS

10", 12", 16" or 18" O.C. 1-3/4" High

UL-90



PRODUCT FEATURES

- ▶ Architectural/structural panel
- ▶ Factory-applied sealant available
- ▶ Continuous interlock
- ▶ Labor-saving one-piece design
- ▶ Pencil ribs upon request
- ▶ Striations upon request
- ▶ Factory eave notching available
- ▶ 30-year-non-prorated finish warranty
- ▶ Maximum factory-produced panel length is 64' (check w/factory for longer lengths)
- ▶ Weathertightness warranty available

- ▶ 43 stocked colors (24 gauge steel)
- ▶ 16 Stocked colors (22 gauge steel)
- ▶ 36 stocked colors (.032 aluminum)
- ▶ 22 stocked colors (.040 aluminum)
- ▶ Panels available in Galvalume Plus

UL CLASSIFICATION

- ▶ UL-580 Class 90 wind uplift
- ▶ UL-1897 wind uplift
- ▶ UL-790 Class A fire rated
- ▶ UL-263 fire resistance rated
- ▶ UL-2218 impact resistance rated

- ▶ UL-90 rated aluminum panel up to 16" O.C.
- ▶ UL-90 rated steel panel up to 18" O.C.

ASTM TESTS

- ▶ ASTM E1592 tested
- ▶ ASTM E283/1680 tested
- ▶ ASTM E331/1646 tested

FLORIDA BUILDING & MIAMI-DADE PRODUCT APPROVALS

Please refer to pac-clad.com or your local factory for specific product approval numbers for Snap-Clad.

Note: UL 90 is available on steel panels up to 18" on center, and on aluminum panels up to 16" on center.

PAC-CLAD® 30 Year Limited Warranty

Owner:
 Address:
 Contractor: _____ of _____
 Customer:
 Invoice Num. & Date:
 Date Warranty Begins: _____ Date Warranty Ends: _____
 Job Name:

PART I

PETERSEN ALUMINUM CORPORATION (hereinafter referred to as "PAC") hereby issues the following limited warranty to the above referenced owner (hereinafter referred to as OWNER) exclusively. Subject to the terms and conditions listed below, PAC warrants that upon delivery its standard color Fluoropon® coating (hereinafter referred to as the "COATING") applied to aluminum, G-90 hot-dipped galvanized steel or AZ50 zinc-aluminum alloy steel sheet and coil that has been fabricated, roll-formed or otherwise manufactured, within one year from the date of shipment thereof by PAC, and sold for use as painted roofing panels, fascia, mansard, soffit or other building components, will for a period of thirty (30) years [ten (10) years in the case of Award Blue and Cardinal Red.] from the project completion date listed above (hereinafter referred to as the "WARRANTY PERIOD"), meet the following quality standards:

- A. WILL NOT chalk in excess of ASTM D-4214 number eight (8) rating.
- B. WILL NOT change color more than five (5.0) Hunter ΔE units [(7.0) Hunter ΔE units in the case of Award Blue and Cardinal Red.] as determined by ASTM method D-2244-02 after removal of external deposits and chalk. It is understood by all the parties herein named, that fading or color change may not be uniform in appearance between surfaces not equally exposed to the sun and other weathering elements. This paragraph is not applicable in its entirety for all PAC-CLAD® metallic colors or custom Fluoropon® Classic or Fluoropon® Classic II colors.
- C. WILL NOT crack, check, peel or otherwise lose adhesion. The terms, crack, check and peel, used herein shall not include minute fracturing of the COATING incurred during proper fabrication. In addition loss of adhesion of the COATING as a result of substrate corrosion, however caused, and either from the front side or the backside of the substrate is specifically excluded from this warranty.

The following additional terms, conditions and other limitations are also included as part of this warranty:

PART II

- 1.) This warranty and all terms, conditions and exclusions contained herein apply to PAC's COATING only. In regards to either the aluminum, G-90 hot-dipped galvanized steel or AZ50 zinc-aluminum alloy steel substrates to which the COATING has been applied or any solar panels/solar film applied to the COATING, PAC makes no representations or other warranties whatsoever. ALL BASE METAL SUBSTRATES AND SOLAR PANEL/FILMS ARE SOLD AS IS. In addition, PAC makes no representations or otherwise warrants the weather tightness of the roofing panels, fascia, mansard, soffit or other building components referred to in Part I. Further, PAC is expressly to be held harmless for failures, leaks or consequential damages caused by the roofing panels, fascia, mansard, soffit or other building components.
- 2.) This warranty applies to the COATING installed on structures within the continental United States that have been exposed to normal weather and atmospheric conditions only. Failure of the COATING caused by exposure to harmful fumes, cement dust, falling sand, animal waste or its decomposition by-products, dust particles and other foreign substances in the air, chemical fumes, chemical sprays and installations with a proximity of less than a one-half mile radius from a seacoast, saltwater or other brackish water environment are all excluded from this warranty. In addition, this warranty does not apply to failure of the COATING caused by or as a result of fire, other accident or casualty, vandalism, radiation, falling objects, explosions, riots or acts of God. Also, the warranty is void for areas where materials / items such as snow guards, solar panels or solar films are attached to the COATING. In addition, the warranty is void if the COATING is perforated. Finally, this warranty does not apply to failure of the COATING caused by the following: damage incurred during shipment, improper storage, improper fabrication or improper installation, improper seaming techniques, surface scratches or other abrasions however caused, damage caused by contact with areas subject to water run-off from lead, copper or other incompatible flashings or areas in metallic contact with lead, copper or other dissimilar metals, damage caused by failure to provide free drainage of water, including internal condensation from overlaps, and all other surfaces of the roofing panels, fascia, mansard, soffit or other building components, damage caused by failure to remove debris or other accumulations of foreign substances from the surface of the roofing panels, fascia, mansard, soffit or other building components, damage caused by contact with green or wet lumber, damage caused by contact with or close proximity to damp underlayment, insulation, soil, vegetation or other corrosive materials and/or damage caused by use of unsuitable fasteners or flashings. Selection of suitable long-lasting fasteners as well as appropriate flashings rests solely with the OWNER.
- 3.) This warranty does not apply to failure of the COATING in the following additional circumstances: forming where the bend is tighter than 2T, forming which involves severe reverse bending, or which subjects the COATING to alternate compression and tension, roofing applications where the slope of the roof, or sections of the roof, are flatter than ½": 12", applications where the COATING is sheltered from periodic washing by natural rainfall such as underside eaves and soffits, or discoloration or damage to the COATING caused by failure to remove factory applied protective strippable film (where applicable).

PART III

- 1.) All claims filed under the provisions of this warranty must be presented by the OWNER to PAC, in writing, during the WARRANTY PERIOD and not more than thirty (30) days after discovery of any apparent defects, delivered by Registered or Certified mail to the following address:

Petersen Aluminum Corp.
1005 Tonne Rd.
Elk Grove Village, IL 60007
ATTN: Warranty Claims

In submitting a claim under the provisions of this warranty, it is the responsibility of the OWNER to provide adequate documentation of the COATING involved in the claim, including date of installation, name of installer and contractor (if different), PAC order number, PAC invoice number and proof of payment to PAC for all such materials included as part of the claim. In no event will any claims be honored under the provisions of this warranty if invoices from PAC have not been previously satisfied in full within PAC's standard credit terms. OWNER further agrees to allow PAC to inspect all such documentation.

- 2.) After receipt of claim from owner, PAC will be given a reasonable opportunity to examine or cause to be examined, the COATING claimed to be non-conforming. OWNER shall further use reasonable care to protect any disputed material until PAC has had time to conduct its own inspection and make disposition.
- 3.) If after inspection it is determined by PAC that the claim is valid under the terms of this warranty, then PAC agrees, at its option, to refinish, repair or replace the defective COATING on the following basis:
 - a. If the COATING is to be refinished then PAC shall bear the cost of materials and labor reasonably necessary to repaint those areas showing failure. Further, PAC shall use normal painting practices to apply a Kynar 500® or Hylar 5000® coating system or other suitable alternative. The choice of appropriate coating system to use rests exclusively with PAC.
 - b. In the case of repair or replacement of the defective COATING, PAC shall at its option, and F.O.B. PAC plant, furnish either replacement components or sufficient sheet to fabricate replacement components, for those areas of the building where the COATING is determined to be defective. However, in no event shall PAC be liable for the cost of labor expended by others on any nonconforming material or for any special, indirect or consequential damages to anyone by reason of the fact that such material may have been nonconforming.

This warranty shall apply to the part or parts of the COATING refinished, repaired or replaced by PAC, but only for the unexpired portion of the WARRANTY PERIOD applicable to the original COATING only. It will be at the discretion of PAC what appropriate measure shall be taken; that is whether the COATING should be refinished, repaired or replaced. However, in lieu of any of the foregoing alternatives PAC also reserves the right to refund to the OWNER a cash amount equal to PAC's original invoiced price of the nonconforming material as satisfaction in full for all claims under this warranty. In addition, should repair or replacement of the nonconforming materials necessitate the removal of solar panels/solar films PAC assumes no responsibility for either the original, replacement or reinstallation costs of these solar panels/solar films. At no time does this warranty confer upon the OWNER the right to refinish, repair or replace those areas of COATING under dispute without written notice and agreement by a duly authorized officer of PAC. Any unauthorized refinish, repair or replacement of the COATING shall result in this warranty becoming null and void.

PART IV

- 1.) Except as provided herein, PAC makes no warranty or guarantee, express or implied, including without limitation, WARRANTIES OF FITNESS AND MERCHANTABILITY. Further, OWNER acknowledges that PAC shall have no other liability to any other person, firm, or corporation with respect thereto, including, without limitations, any liability for indirect, consequential or resultant damages, whether based upon breach of warranty or negligence.
- 2.) PAC extends this warranty solely to the OWNER listed herein. This warranty is non-transferable and non-assignable.
- 3.) This warranty shall be subject to and shall be enforced and construed according to the laws of the State of Illinois. Any legal action to enforce or construe any portion of this warranty shall be brought in a Court of competent jurisdiction in Cook County, Illinois.
- 4.) If any provision of this warranty shall be held by any Court of competent jurisdiction to be invalid or unenforceable in whole or in part, the remaining provisions of this warranty shall be effective to the same extent as if such invalid or unenforceable provision had never been contained herein.
- 5.) PAC reserves the right to terminate this warranty at any time upon thirty (30) day written notice. However termination shall not affect the rights accruing to the OWNER prior to such termination.
- 6.) Both the supplier of the PAC COATING and the applicator thereof have made certain warranties to PAC which are similar to the warranties made by PAC to the OWNER under this limited warranty. In the event that the supplier and or applicator (or its successors or assigns) of the coating can no longer perform, or is not willing to perform, its obligations to PAC, then the limited warranty contained herein shall be of no further force or effect.
- 7.) The terms hereof shall constitute the entire agreement and understanding of the parties hereto respecting the subject matter hereof and no provision or statement contained at any time in any other writing, including without limitation, OWNERS, customers and/or contractors purchase orders, architects specifications or PAC's acceptance forms shall be effective to change the provisions hereof, unless contained in a subsequent agreement, in writing, signed by both the OWNER and PAC expressly stating that it is intended thereby to modify or supplement this instrument.

PETERSEN ALUMINUM CORPORATION

By: _____

*** *Not valid without Authorized Signature* ***

Date: _____

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Hylar 5000® is a registered trademark of Ausimont USA, Inc.

Kynar 500® is a registered trademark of Atochem N.A.
PAC-CLAD® is a registered trademark of Petersen Aluminum Corporation