

GENERAL NOTES:

CPI WILL MAKE ALL FURTHER DESIGN DECISIONS BASED UPON THE INFORMATION PROVIDED ON THIS FORM. THIS INCLUDES, BUT IS NOT LIMITED TO, THE USE OF A 2.75" OR 4" QUADWALL SYSTEM, ADDITIONAL STRENGTHENING FOR SPAN SIZES, CHOICE OF RAFTER SIZES, AND BAY SIZING. ALL ELEMENTS WILL BE SYMMETRICAL WITHIN THE UNIT AND CPI STANDARD VALUES WILL BE USED THROUGHOUT.

ALL EXTRUDED ALUMINUM FRAMING MEMBERS SHALL BE OF A 6063-T6 OR 6005-T5 ALLOY AND TEMPER.

ALL FASTENERS SHALL BE OF A NON-CORRODING MATERIAL.

CURB FASTENERS WILL BE DETERMINED BY CURB CONSTRUCTION (WOOD, STEEL)

PANEL SECTIONS ARE TYPICALLY PRE-ASSEMBLED IN MODULES OF 6'(NOMINAL) CL TO CL, UNLESS CPI CALCULATIONS REQUIRE AN ALTERNATE SPACING. MAKE UP BAYS ARE STANDARD AT THE ENDS OF ALL UNITS AND WILL BE LESS THAN THE TYPICAL BAY SIZE.

ONE (1) PART SILICONE SEALANT, DOW CORNING SERIES #999 TO BE USED WHERE SHOWN.

MINIMUM CURB THICKNESS MUST BE 4". THE SUPPORT CURBS SHALL BE DESIGNED AND CONSTRUCTED BY OTHERS TO RESIST LOADS IMPOSED BY THE SKYLIGHT. SEE CURB LOAD INFORMATION ON FOLLOWING SHEETS.

UNITS ARE SHIPPED WITH PANELIZED GLAZING, FRAMES KNOCKED DOWN. SHOP DRAWINGS FOR INSTALLATION SHIP WITH UNITS.

TEST REPORT CERTIFICATION:

CPI CERTIFIES THAT THE GLAZING PANELS MEET THE FOLLOWING STANDARDS.

| TEST DESCRIPTION | TEST STANDARD | RESULTS | CPI REPORT # |
|---|-------------------|---|--------------|
| EVALUATION REPORT | IBC | IBC EVALUATION REPORT #4798 | 111 |
| CODE CLASSIFICATION | IBC CHAPTER 26 | APPROVED LIGHT TRANSMITTING PLASTICS, CC1 RATING | |
| FLAMABILITY | | | |
| SELF IGNITION | ASTM 1929-3 | 1058F | 211 |
| SMOKE DENSITY OF PLASTIC | ASTM D2843 | 54% | 210 |
| BURN EXTENT | ASTM D635 | CC1 RATING - LESS THAN 1.0" BURN EXTENT | 212A, 212B |
| INTERIOR FLAME SPREAD & SMOKE DEVELOPMENT | ASTM E84 | CLASS A FLAME SPREAD & SMOKE DEVELOPMENT RATING - FLAME SPREAD INDEX LESS THAN 25 | 213 |
| WEATHERING | | | |
| COLOR CHANGE | ASTM D2244 | NO MORE THAN 4 UNITS DELTA E AFTER 60 MONTHS | 411, 412 |
| WEATHERING | ASTM D4364 & E903 | TOTAL SOLAR TRANSMITTANCE, 60 MONTHS | 410 |
| LIGHT TRANSMISSION | ASTM D1003 | SHALL NOT DECREASE MORE THAN 6% AFTER 10YRS | 413 |
| HEAT EXPOSURE | 300F - 25MIN | HEAT EXPOSURE EVALUATION STANDARD PASSED | 411 |
| WATER PENETRATION | ASTM E331 | NO PENETRATION OF H CONNECTORS AT 6.24PSF | 323 |
| FIELD TEST WATER PENETRATION | AAMA 501.2 | NO PENETRATION | |
| IMPACT RESISTANCE | SPI METHOD B | 220 FT-LBS | 513A, 513B |
| LARGE MISSILE CANNON TEST | ASTM E1886/E1996 | WITHSTANDS LARGE MISSILE IMPACT OF 350 FT-LBS | 512B |
| OSHA - POINT LOAD | 29 CFR 1910.23 | 300 LB POINT LOAD WITH NO DAMAGE | 515 |
| OSHA - FALL / WALK THROUGH | ASTM E695-03 | 500 FT-LBS | 512B |
| U FACTOR | PER NFRC 100 | 0.23, CENTER OF GLASS, QUADWALL | 310B |

ICC-ES Evaluation Report

ESR-1253

www.icc-es.org | (800) 423-6587 | (562) 699-0543 A Subsidiary of the International Code Council®

DIVISION: 08 00 00—OPENINGS
Section: 08 84 00—Plastic Glazing

REPORT HOLDER:

CPI DAYLIGHTING, INC.
28662 NORTH BALLARD DRIVE
LAKE FOREST, ILLINOIS 60045
(847) 816-1060
www.cpidaylighting.com

EVALUATION SUBJECT

QUADWALL, UNIQUAD, PENTAGLAS, DUALWALL AND U-LITE PANELS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2012, 2009 and 2006 International Building Code® (IBC)
- 2013 Abu Dhabi International Building Code (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Property evaluated:
Light-transmitting plastics

2.0 USES

The Quadwall, UniQuad, Pentaglas, Dualwall and U-Lite panels described in this report comply with the requirements for light-transmitting plastics in 2012, 2009 and 2006 IBC Section 2606.4. End use of the panels is outside the scope of this report, thereby requiring that compliance with the IBC requirements applicable to the end use (such as, but not limited to, structural and durability performance) be demonstrated to the code official.

3.0 DESCRIPTION

The Quadwall, UniQuad, Pentaglas, Dualwall and U-Lite translucent polycarbonate panels recognized in this report are light-transmitting plastics complying with IBC Section 2606.4, and have a CC1 plastic combustibility classification. The panels are available in up to a 45.3-foot (13 800 mm) length and in various widths, thicknesses and configurations. See Table 1 and Figure

1 for size and configuration details. As shown in Table 1 and Figure 1, the 8- and 10-millimeter-thick Quadwall, UniQuad, and Pentaglas panels are identical panels, except for the product name.

4.0 INSTALLATION

Use of the Quadwall, UniQuad, Pentaglas, Dualwall and U-Lite panels recognized in this report is limited to applications permitted by the IBC for light-transmitting plastics. The manufacturer's published installation instructions and this report must be strictly adhered to.

5.0 CONDITIONS OF USE

The Quadwall, UniQuad, Pentaglas, Dualwall and U-Lite panels described in this report comply with, or are suitable alternatives to what is specified in, those codes indicated in Section 1.0 of this report, subject to the following conditions:

5.1 The panels are manufactured, installed and identified as called for in this report, the IBC and the manufacturer's published installation instructions. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.

5.2 End use of the panels requires justification of compliance with appropriate code requirements, including installation, structural, impact and durability considerations.

6.0 EVIDENCE SUBMITTED

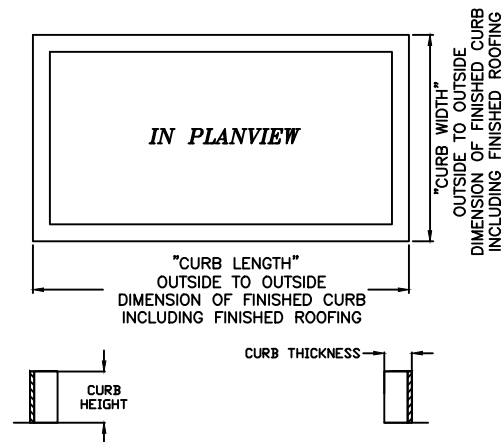
6.1 Reports of tests in accordance with ASTM D1929, ASTM D2843, ASTM D635, and ASTM E84.

6.2 Quality documentation.

7.0 IDENTIFICATION

The panels are identified with a label bearing the manufacturer's name (CPI Daylighting), the product name (Quadwall, UniQuad, Pentaglas, Dualwall or U-Lite), the CC1 plastic classification and the evaluation report number (ESR-1253).

CURB TERMINOLOGY:



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SKYLIGHTS - QUADWALL - VAULT, RIDGE, HIPPED RIDGE, PYRAMID

- DATA ENTRY FORM -

- SKYLIGHT SHAPE:
 - VAULT (SELECT END CONDITIONS)
 - RIDGE (SELECT END CONDITIONS)
 - HIPPED RIDGE
 - PYRAMID
- SKYLIGHT ENDS (FOR VAULT AND RIDGE ONLY):

| | |
|--|--|
| END 1 | END 2 |
| <input type="checkbox"/> CPI GABLE | <input type="checkbox"/> CPI GABLE |
| <input type="checkbox"/> EXISTING WALL | <input type="checkbox"/> EXISTING WALL |
| <input type="checkbox"/> OPEN | <input type="checkbox"/> OPEN |
- CURB MATERIAL:
 - STEEL -
 - 12GA STEEL CURB
 - 1/4" STEEL CURB (REQUIRED FOR RIDGES & PYRAMIDS OVER 14' WIDE)
 - WOOD -
 - MINIMUM OF (2) 2" X 6" LUMBER WILL BE REQUIRED. (DOUGLAS FIR, G = 0.49 MIN)
- CURB DIMENSIONS:

| | |
|--------------|---|
| CURB LENGTH: | _____ (EXACT OUT-TO-OUT TO NEAREST 1/16") |
| CURB WIDTH: | _____ (EXACT OUT-TO-OUT TO NEAREST 1/16") |

| | LOW-RISE VAULT | HALF-ROUND VAULT | RIDGE | HIPPED RIDGE/PYRAMID |
|-------------------|----------------|------------------|---------|----------------------|
| STEEL CURB (12GA) | 18' MAX | 14' MAX | 14' MAX | 14' MAX |
| STEEL CURB (1/4") | 18' MAX | 14' MAX | 18' MAX | 16' MAX |
| WOOD CURB | 18' MAX | 14' MAX | 12' MAX | 12' MAX |
- NOMINAL HEIGHT: (FROM TOP OF CURB TO BOTTOM OF CPI RAFTER AT APEX OF SKYLIGHT)
 - USE MINIMUM PITCH OF 4:12 FOR RIDGES/PYRAMIDS OR STANDARD 21% RISE FOR LOW RISE VAULTS
 - USE NON-STANDARD PITCH: _____:12 OR _____ HT (IN FEET & INCHES FROM TOP OF CURB TO BOTTOM OF CPI RAFTER AT APEX OF SKYLIGHT) (MINIMUM 4:12 PITCH FOR RIDGES/PYRAMIDS, 13% RISE FOR VAULTS)
- EXTERIOR & INTERIOR GLAZING:

| | |
|--|--|
| EXTERIOR GLAZING COLOR (10MM) | INTERIOR GLAZING COLOR (8MM) |
| <input type="checkbox"/> CLEAR | <input type="checkbox"/> CLEAR MATTE |
| <input type="checkbox"/> ICE WHITE | <input type="checkbox"/> ICE WHITE MATTE |
| <input type="checkbox"/> WHITE | <input type="checkbox"/> WHITE MATTE |
| <input type="checkbox"/> REFLECTIVE GRAY | |
| <input type="checkbox"/> GREEN | |
| <input type="checkbox"/> BLUE | |
| <input type="checkbox"/> BRONZE | |
- ALUMINUM FINISH & COLOR:
 - MILL
 - STANDARD CPI CRF (2603) → COLOR NAME _____
 - PREMIUM CPI CRF (2604) → COLOR CODE _____
 - PREMIUM+ CPI CRF (2605)/STD. 70% KYNAR (2 COAT)
 - ANODIZED →
 - CLEAR 204-R1
 - CLEAR 215-R1
 - DARK BRONZE ANO-303
- QUANTITY OF IDENTICAL UNITS: _____ (PLEASE USE SEPARATE SUBMITTAL FORMS FOR VARYING SKYLIGHT SHAPES AND SIZES.)

9 AUTHORIZATION TO PROCEED:

THIS PAGE DEFINES ALL SPECIFICATIONS FOR THIS SKYLIGHT ORDER - I HAVE NO FURTHER SPECIFICATIONS OR REQUIREMENTS.

CPI QUOTE #: _____ ITEM #: _____

PROJECT NAME: _____

COMPANY: _____

SIGNATURE: _____

AUTHORIZED SIGNER: (PLEASE PRINT) _____

DATE: _____

NOTE: COMPLETE JOB INFO SHEET REQUIRED BEFORE RELEASE TO FABRICATION.

MAXIMUM DIRECT2FAB LOADS ARE AS FOLLOWS:
40PSF WIND-UP/LIFT
25PSF WIND-DOWNWARD
30PSF SNOW/LIVE

DIRECT2FAB SYSTEMS WERE DESIGNED BASED ON ASD LOAD COMBINATIONS OF THE MAXIMUM LOADS ACCORDING TO ASCE7.

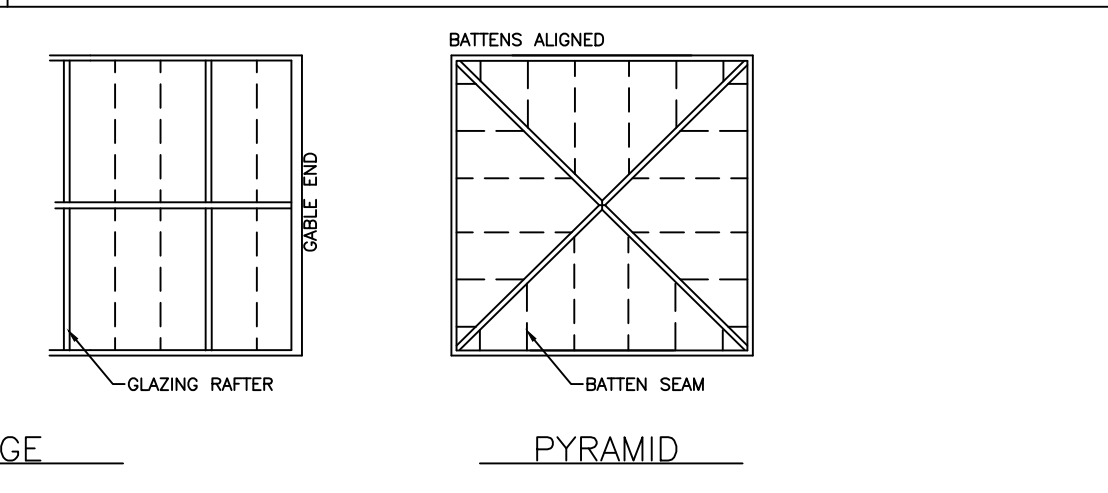
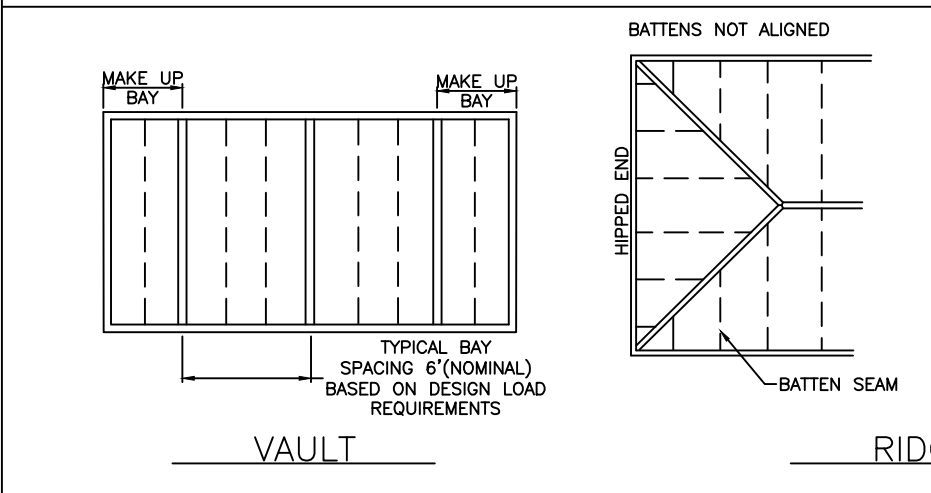
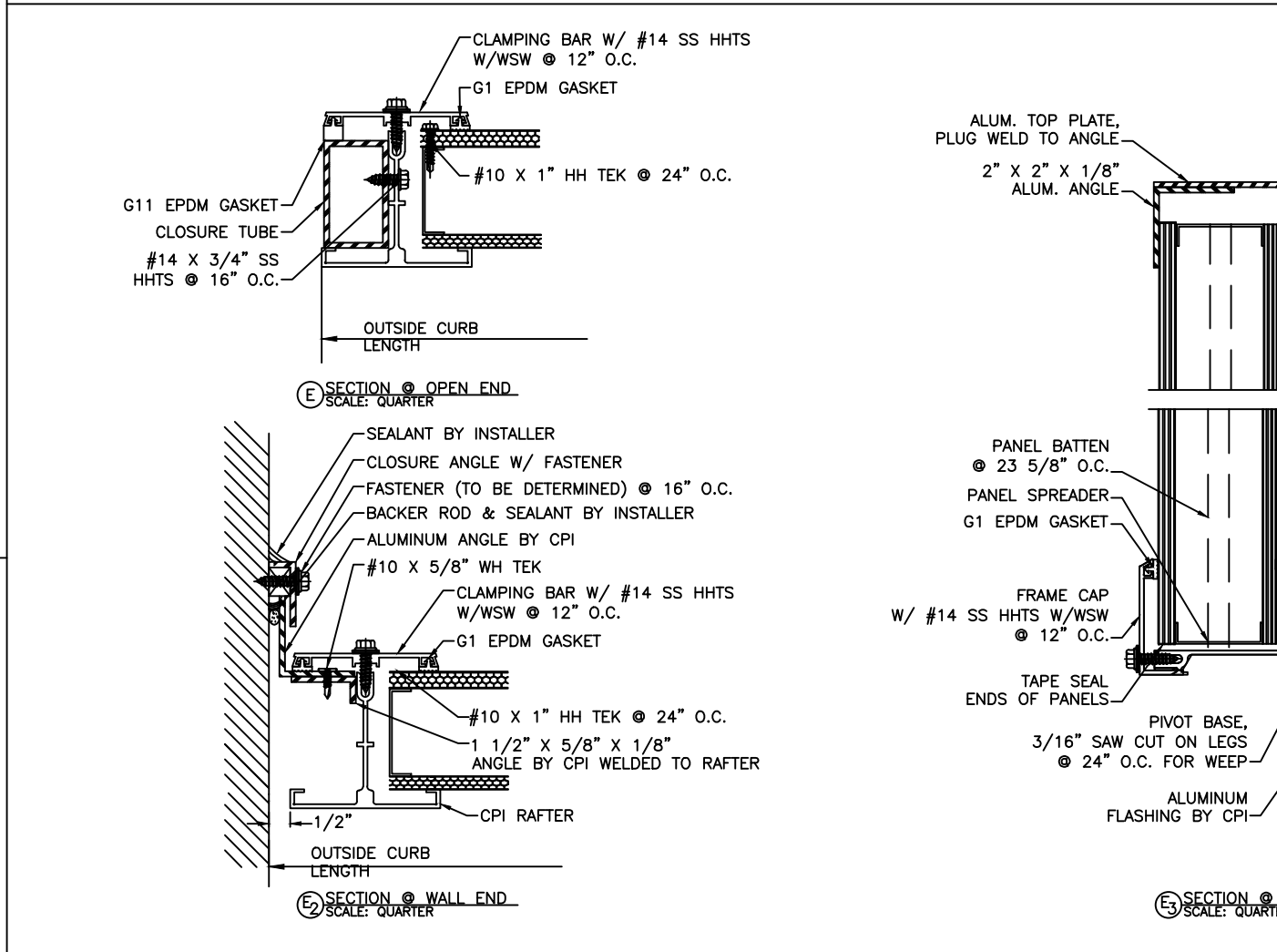
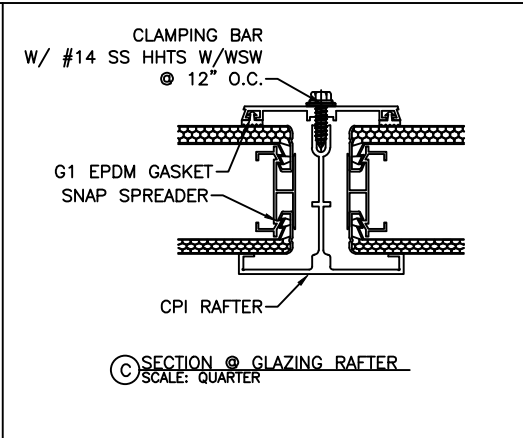
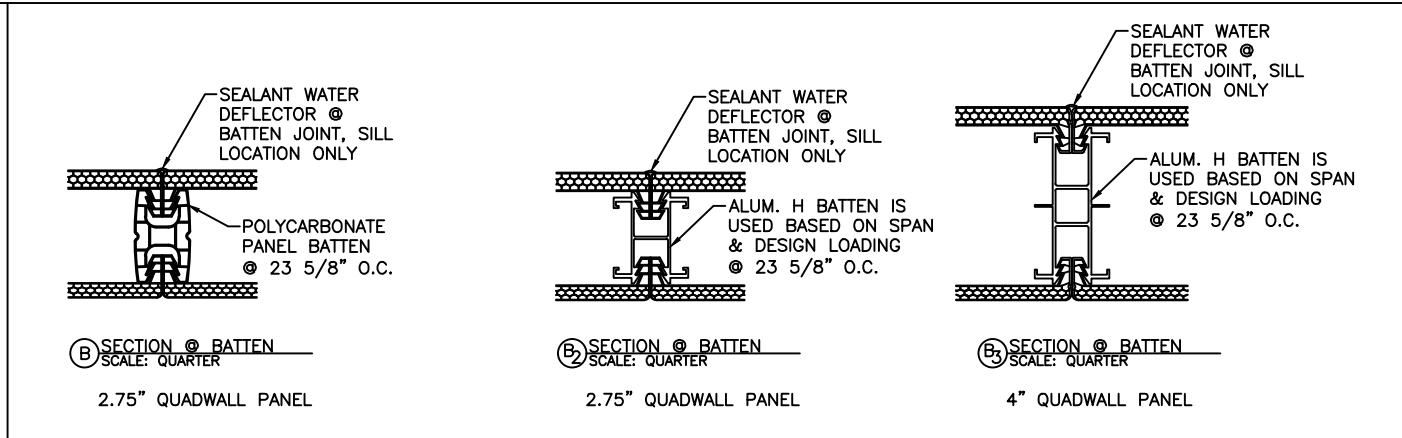
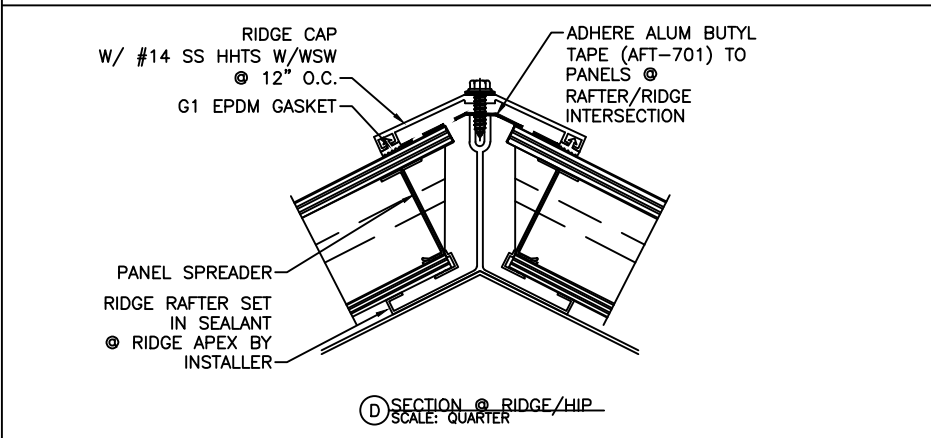
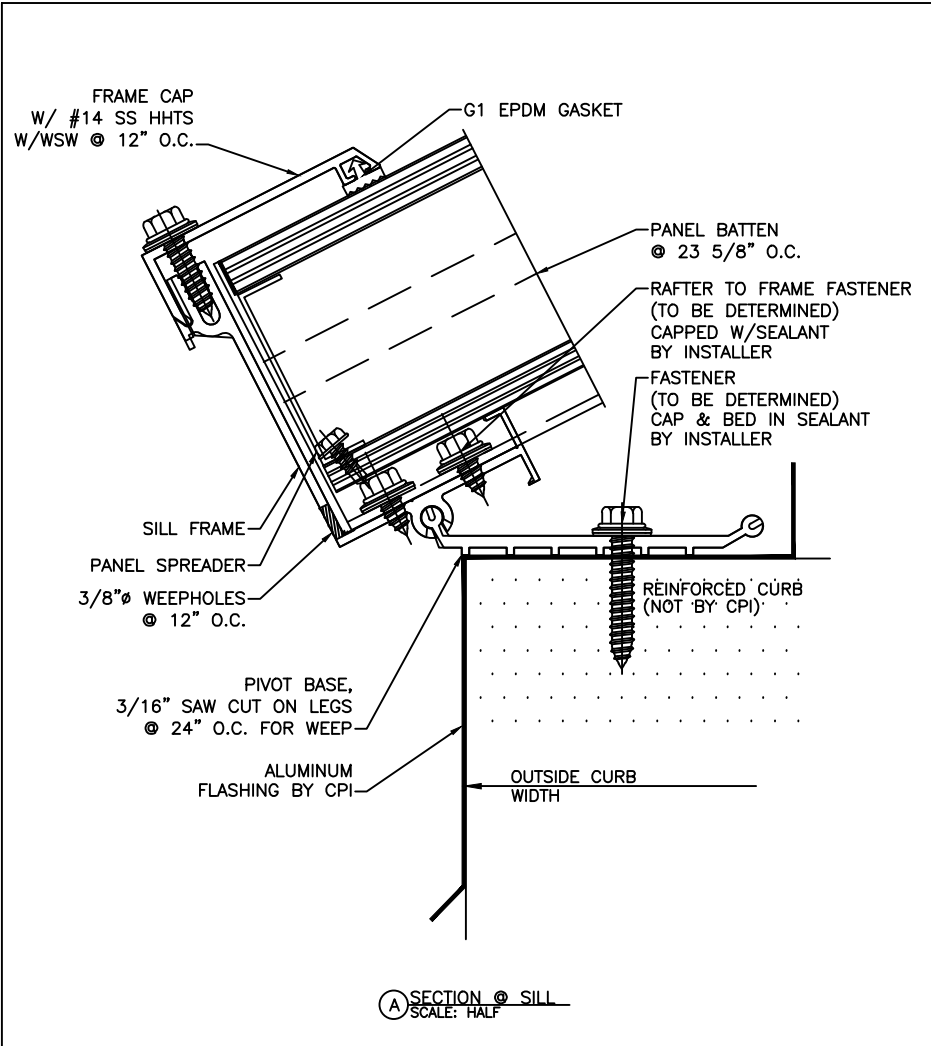
SNOW/LIVE LOAD MUST INCLUDE A COMBINATION OF BALANCED SNOW LOAD AND ANY ASSOCIATED DRIFT LOAD.

DIRECT2FAB

SUBMITTAL PACKAGE
RECTANGULAR SKYLIGHTS, UP TO 18FT WIDE
SKYLIGHTS-QUADWALL-VAULT, RIDGE, HIPPED RIDGE, PYRAMID
GENERAL NOTES, TECHNICAL DATA
"DIRECTLY FROM ORDER ENTRY TO FABRICATION FLOOR"

CPI Daylighting
Building Envelope Solutions

Kingspan
Light+Air



NOTE: SCALE OF DETAILS WILL BE ACCURATE ONLY WHEN PRINTED WITH 1:1 SCALING ON 11 X 17 PAPER

NOTE: RAFTER SIZES, BAY SPACING AND LAYOUT ARE STANDARD BASED ON SPAN & DESIGN LOAD CONSIDERATIONS AND MAY NOT BE ALTERED.

ALL UNITS SHARE THESE DETAILS. SYSTEM IS SHOWN AS 2.75" QUADWALL PANEL THICKNESS. CPI MAY ELECT TO USE 4" QUADWALL PANEL THICKNESS SYSTEM BASED ON SPAN AND LOADING CONSIDERATIONS.

DIRECT 2 FAB

SUBMITTAL FORM SKY-1

SUBMITTAL PACKAGE
RECTANGULAR SKYLIGHTS, UP TO 18FT WIDE
SKYLIGHTS-QUADWALL-VAULT, RIDGE, HIPPED RIDGE, PYRAMID

"DIRECTLY FROM ORDER ENTRY TO FABRICATION FLOOR"

CPI Daylighting
Building Envelope Solutions

Kingspan
Light+Air

SHEET:
SKY-1B

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CPICRF™ Paint & Anodized Finishes

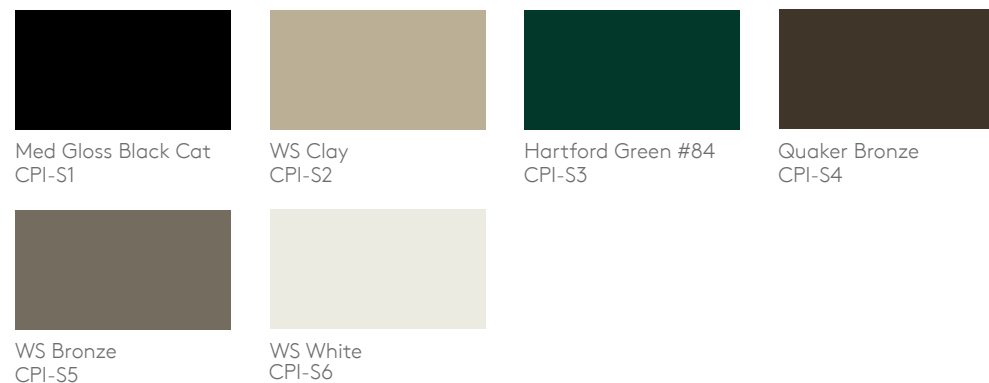
High Performance Architectural Coatings

CPICRF is a Corrosion Resistant Finish coating that includes Kynar®, Trinar®, or Hylar® fluoropolymer* and TGIC Polyester resins.

Standard Paint Finish Colors

CPICRF | TGIC Polyester resin powder coating (AAMA 2603) 1 or 5-year warranty

This economical and eco-friendly coating is available in a wide range of standard paint colors, and does not emit VOC gases into the atmosphere. CPICRF meets AAMA 2603 and comes with a 1-year standard warranty, or an optional 5-year extended warranty.



CPICRF - Premium | Polymer resin powder coating (AAMA 2604) 10-year warranty

This eco-friendly coating is available in a wide range of premium paint colors, and does not emit VOC gases into the atmosphere. CPICRF - Premium meets AAMA 2604 and comes with a 10-year standard warranty.



CPICRF - Premium Plus (Kynar®) | 70% PVDF (AAMA 2605) 10 or 20-year warranty

This 2-coat Kynar finish is available in a variety of premium paint colors. CPICRF - Premium Plus meets AAMA 2605 and comes with a 10-year standard warranty, or an optional 20-year extended warranty.



Anodized Finishes

CPI Anodized Finishes | Class II (204), Class I (215), and color 1 or 5-year warranty

CPI Daylighting offers anodized finishes - Clear Anodized and Dark Bronze Anodized. The anodized finish comes with a 1-year standard warranty with an option for a 5-year extended warranty.

The colors shown are not exact and may vary slightly from the actual colors - Physical samples on aluminum substrates are available for final color selection. For exact colors, please contact us at 1.800.759.6985 to order color samples. Slight color variation can be expected in production. Color options are also subject to change. Please contact CPI Daylighting to confirm availability.

*Kynar® is a registered trademark of Arkema - Trinar® is a registered trademark of AkzoNobel - Hylar® is a registered trademark of Solvay