

**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 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**

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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**

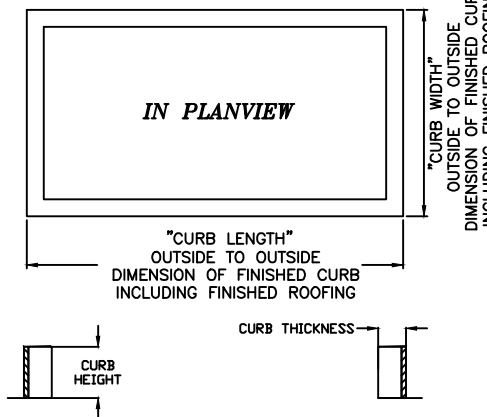
6.1 Reports of tests in accordance with ASTM D1929, ASTM D2843, ASTM D635, and ASTM E84.

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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U.S. PATENT #'S: 7,281,353,B2-6,164,024-5,437,129-5,348,790-D500,370-5,895,701-D490,544-7,441,379-7,546,708-7,765,760-7,926,236 AND PATENTS PENDING

**SKYLIGHTS - QUADWALL - SADDLE RIDGE**

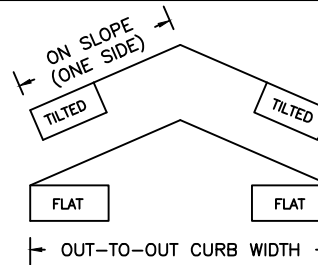
**- DATA ENTRY FORM -**

① SKYLIGHT SHAPE:

SADDLE RIDGE:

② CURB ORIENTATION:

TILTED CURB  
 FLAT CURB



③ CURB MATERIAL:

STEEL -  
 12GA STEEL CURB  
 1/4" STEEL CURB (REQUIRED FOR RIDGES OVER 14' WIDE)  
  
WOOD -  
 MINIMUM OF (2) 2" X 6" LUMBER WILL BE REQUIRED. (DOUGLAS FIR, G = 0.49 MIN)

④ CURB DIMENSIONS:

CURB LENGTH: \_\_\_\_\_ (EXACT OUT-TO-OUT TO NEAREST 1/16")  
CURB WIDTH: \_\_\_\_\_ (EXACT OUT-TO-OUT TO NEAREST 1/16")  
OR \_\_\_\_\_ (EXACT ON SLOPE, ONE SIDE, TO NEAREST 1/16")  
  
STEEL CURBS - 14' MAX OUT-TO-OUT WIDTH FOR ALL PITCHES W/ 12GA STEEL CURB  
- 18' MAX OUT-TO-OUT WIDTH FOR ALL PITCHES W/ 1/4" STEEL CURB  
WOOD CURBS - 8' MAX OUT-TO-OUT WIDTH FOR RIDGES WITH 4:12 THRU 6:12 PITCH  
- 12' MAX OUT-TO-OUT WIDTH FOR RIDGES WITH 6:12 THRU 12:12 PITCH

⑤ NOMINAL HEIGHT: (FROM TOP OF CURB TO BOTTOM OF CPI RAFTER AT APEX OF SKYLIGHT)

USE MINIMUM PITCH OF 4:12 FOR RIDGES  
 USE NON-STANDARD PITCH: \_\_\_\_\_:12 OR \_\_\_\_\_ HT (IN FEET & INCHES FROM TOP OF CURB TO BOTTOM OF CPI RAFTER AT APEX OF SKYLIGHT)

⑥ EXTERIOR & INTERIOR GLAZING:

EXTERIOR GLAZING COLOR (10MM) INTERIOR GLAZING COLOR (8MM)  
 CLEAR  GREEN  CLEAR MATTE  
 ICE WHITE  BLUE  ICE WHITE MATTE  
 WHITE  BRONZE  WHITE MATTE  
 REFLECTIVE GRAY

⑦ ALUMINUM FINISH & COLOR:

MILL  
 STANDARD CPI CRF (2603)  
 PREMIUM CPI CRF (2604) \_\_\_\_\_ COLOR NAME \_\_\_\_\_  
 PREMIUM+ CPI CRF (2605)/STD. 70% KYNAR (2 COAT) \_\_\_\_\_ COLOR CODE \_\_\_\_\_  
  
 ANODIZED \_\_\_\_\_  
  
 CLEAR 204-R1  
 CLEAR 215-R1  
 DARK BRONZE ANO-303

⑧ 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- UPLIFT  
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.

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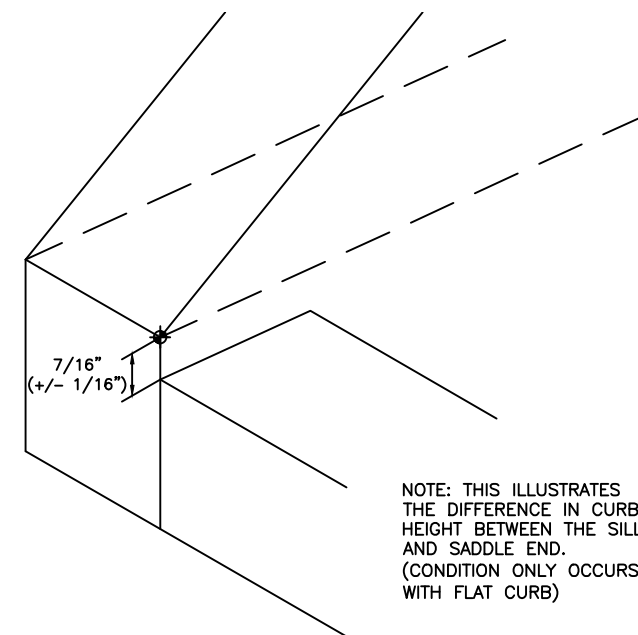
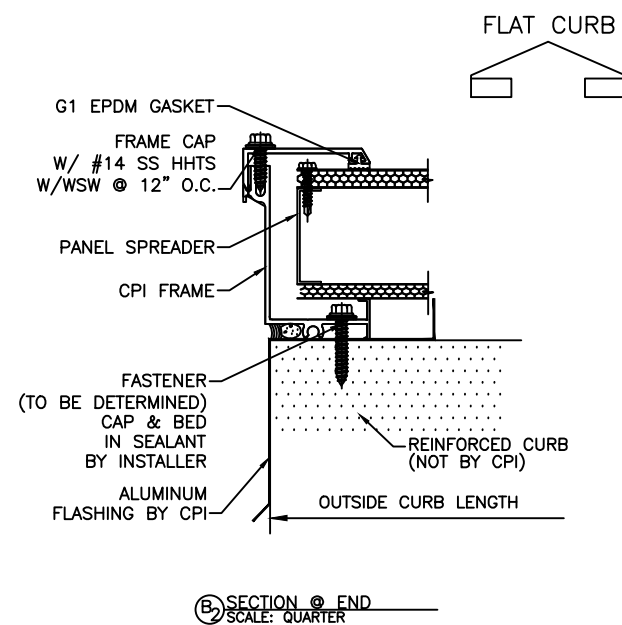
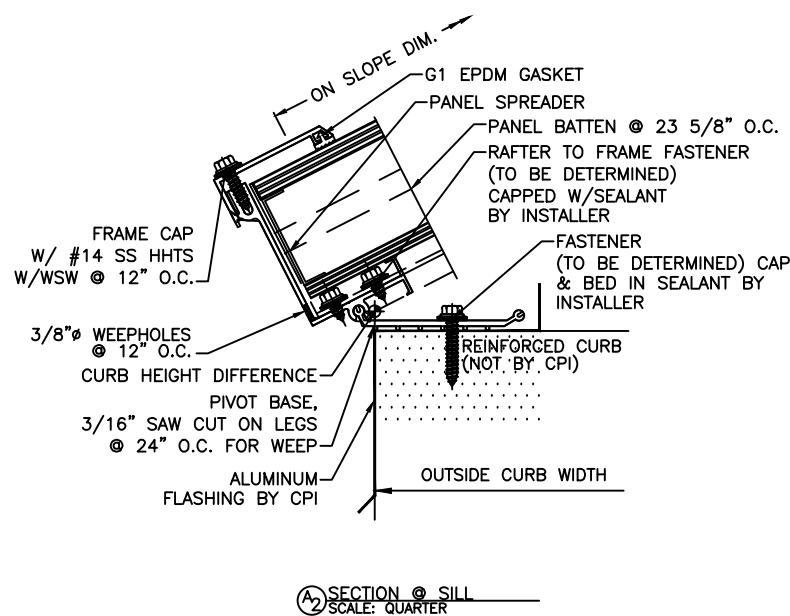
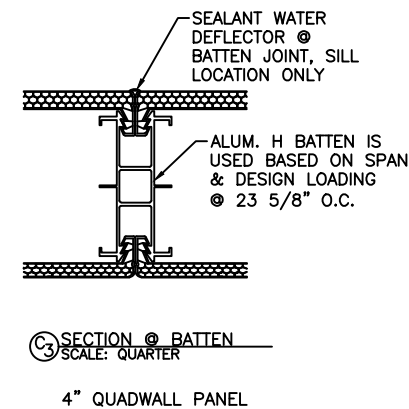
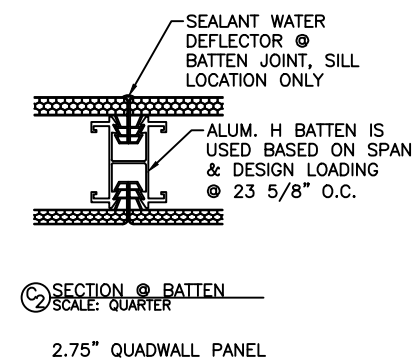
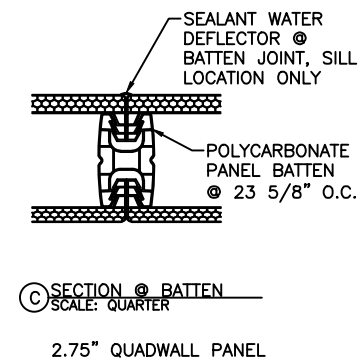
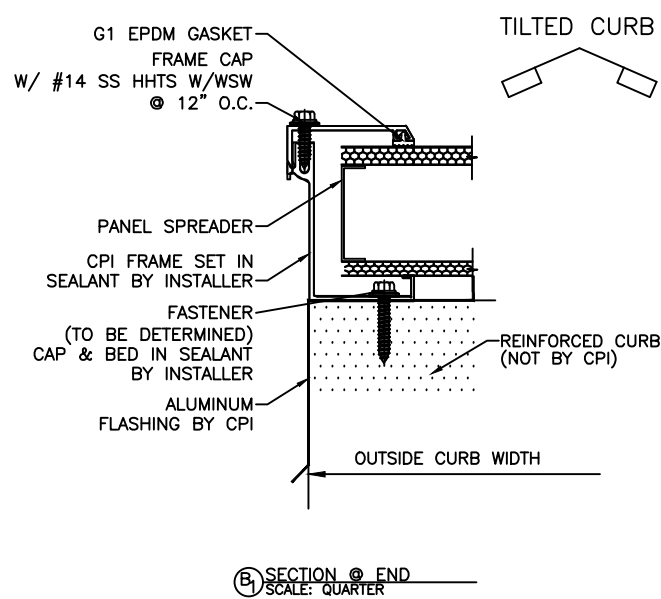
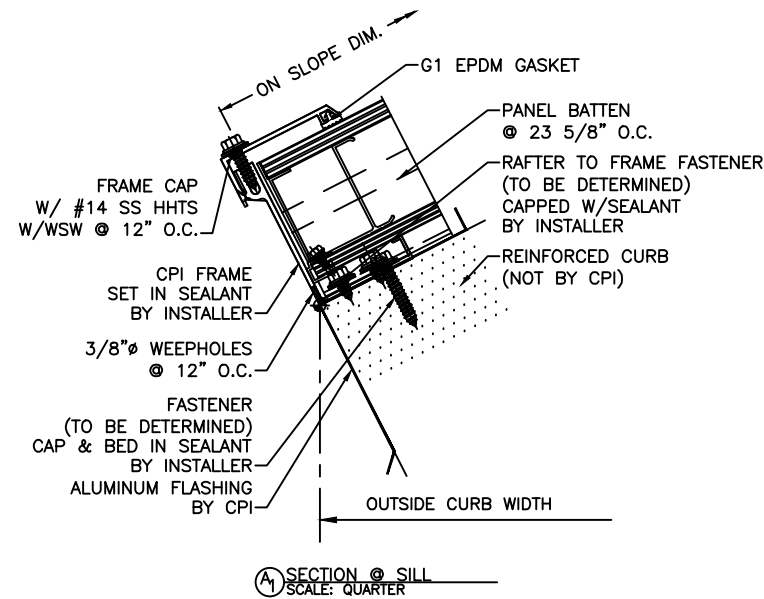
DIRECT2FAB

SUBMITTAL FORM SKY-2  
SUBMITTAL PACKAGE  
RECTANGULAR SKYLIGHTS, UP TO 18FT WIDE  
SKYLIGHTS-QUADWALL-SADDLE RIDGE  
GENERAL NOTES, TECHNICAL DATA  
"DIRECTLY FROM ORDER ENTRY TO FABRICATION FLOOR"

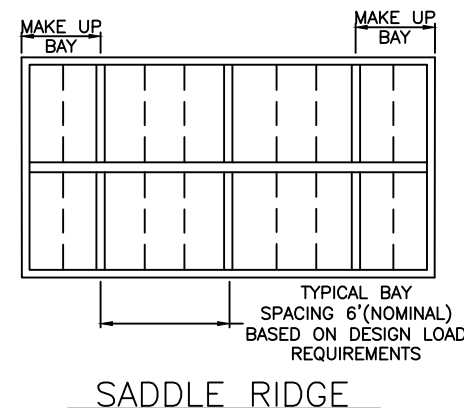
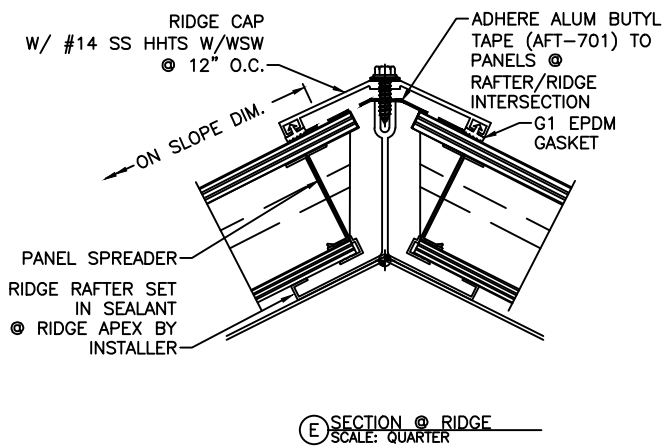
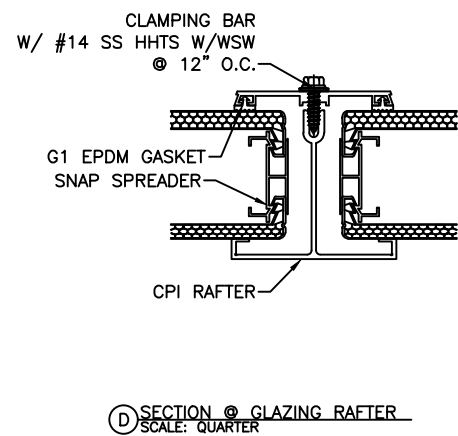
CPI Daylighting  
Building Envelope Solutions

Kingspan  
Light+Air

SHEET:  
SKY-2A  
12/14/15



NOTE: THIS ILLUSTRATES THE DIFFERENCE IN CURB HEIGHT BETWEEN THE SILL AND SADDLE END. (CONDITION ONLY OCCURS WITH FLAT CURB)



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\"/>

**DIRECT 2 FAB**  
 SUBMITTAL FORM SKY-2  
 SUBMITTAL PACKAGE  
 RECTANGULAR SKYLIGHTS, UP TO 18FT WIDE  
 SKYLIGHTS-QUADWALL-SADDLE RIDGE  
 "DIRECTLY FROM ORDER ENTRY TO FABRICATION FLOOR"

**CPI Daylighting**  
Building Envelope Solutions  
**Kingspan**  
Light+Air  
 SHEET:  
 SKY-2B  
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# CPICRF™ Paint & Anodized Finishes

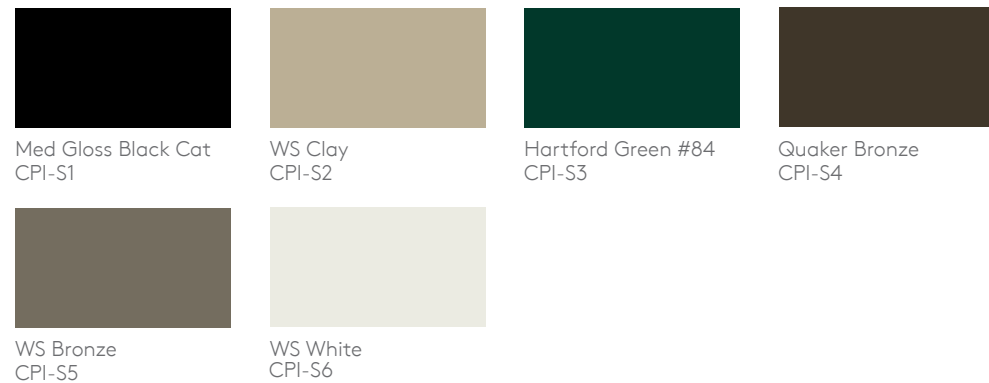
High Performance Architectural Coatings

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