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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Signature Series Prismatic Skylights.
- B. Double Hip Prismatic Skylights.
- C. Pyramid Prismatic Skylights.
- D. Multi-Lite Skylights.
- E. Curb Top Inserts.
- F. Daylighting Smoke Vents.
- G. LightFlex Daylighting Devices.

1.2 RELATED SECTIONS

- A. Section 07 50 00 - Membrane Roofing.
- B. Section 07 62 00 - Sheet Metal Flashing and Trim
- C. Section 07 91 23 - Backer Rods.
- D. Section 09 21 16.33 - Gypsum Board Area Separation Wall Assemblies.
- E. Section 09 51 23 - Acoustical Tile Ceilings.

1.3 REFERENCES

- A. American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE):
 - 1. ASHRAE 90.1 - Energy Standard for Buildings Except Low-Rise Residential Buildings.
- B. ASTM International (ASTM):
 - 1. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
 - 2. ASTM D1003 - Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics,
- C. Factory Mutual System (FM Global):
 - 1. FM Approval Guide, Chapter 18 - Building Materials.
 - 2. FM Standard 4430 - Test Criteria for Heat and Smoke Vents.
 - 3. FM Standard 4431 - Test Criteria for Skylights.

- D. National Fenestration Rating Council (NFRC):
 - 1. NFRC 100 - Procedure for Determining Fenestration Product U-Factors.
 - 2. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance of Normal Incidence.
- E. North American Fenestration Standard (NAFS):
 - 1. AAMA/WDMA/CSA/101/I.S.2/A440 - The Voluntary Performance Specification for Windows, Skylights, and Glass Doors.
- F. Occupational Safety and Health Administration (OSHA):
 - 1. OSHA 1926.502 - Fall protection systems criteria and practices.
 - 2. OSHA 1910 - Occupational Safety and Health Standards.

1.4 SUBMITTALS

- A. Submit in accordance with Division 01 Section "Submittal Procedures".
- B. Product Data: Submit manufacturers current published data on each product to be used including:
 - 1. Materials, dimensions, finishes and standard details.
 - 2. Compliance with design criteria and project conditions.
 - 3. Preparation instructions and recommendations.
 - 4. Storage and handling requirements.
 - 5. Installation instructions.
- C. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square representing actual product, color, and patterns.
- D. Testing Reports: Submit Third Party Testing and Evaluation Reports as required by the local jurisdiction.
- E. Shop Drawings: Include the following:
 - 1. Where design calculations are required, provide shop drawings and calculations bearing the seal of a professional engineer licensed in the jurisdiction of the project.
 - 2. Plans, sections, elevations, flashing, connection, and termination details.
 - 3. Materials, thicknesses, fabrication and installation details including glazing types, methods of attachment and provisions for thermal movement.
 - 4. Type of roofing system provided by others including insulation.
 - 5. Interface details including overall dimensions, thicknesses, and adjacent materials.
 - 6. Safety requirements.
- F. Closeout Submittals: Maintenance instructions and Warranty.

1.5 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer Qualifications: All primary products specified in this section will be supplied by a single manufacturer with a minimum of ten years experience. Secondary products shall be acceptable to the primary manufacturer.
 - 2. Installer Qualifications: All products shall be installed by a single installer with a minimum of five years demonstrated experience, with adequate equipment, skilled workers, and practical experience to meet the project schedule.
- B. Skylights shall conform with authorities having jurisdiction and be designed to meet design criteria of the project location and the following:
 - 1. Skylights must be certified by NFRC.
 - 2. Tested and labeled in accordance to AAMA/WDMA/CSA/101/I.S.2/A440.

3. Factory Mutual (FM) Approval Class Number 4430 or 4431 as applicable.
 4. Projects which fall under the jurisdiction of the Florida Building Code must have a current Florida Building Code (FBC) Number to meet the High Velocity Hurricane Zone (HVHZ) requirements and are required for acceptance of Work specified in this section. Skylight systems must comply with the jurisdictional code body's submittal data and supporting drawings and documentation. Where the code body's acceptance criteria differs from these specifications regarding components and hardware, the code body's requirements shall govern.
 5. Meet or exceed 200 pound (90 kg) Drop Tests.
 6. Skylights shall be designed and installed to carry a minimum 30 psf (1.44 kPa) tributary roof load or greater per site.
- C. Pre-Installation Meeting: Convene on the project site minimum one week before beginning work to:
1. Verify project requirements and site logistics.
 2. Coordinate between trades.
 3. Assess integrity of the roofing system and building structure.
 4. Review manufacturers installation instructions and warranty requirements.
- D. Mock-Up:
1. Provide mock-up of each type of assembly including associated components, accessories, and methods of adjoining construction.
 2. Finish areas designated by the Architect, minimum size: 3 x 3 feet (1 x 1 meter) including all flashing, sealants, and finishes to be provided in the final installation.
 3. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 4. Refinish mock-up area as required to produce acceptable work.
 5. Accepted mock-up may remain as part of the completed work and will set the standard of acceptance for remaining work.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Coordinate delivery schedule with the General Contractor and project schedule to minimize on site storage.
- B. Store products in manufacturer's unopened packaging until ready for installation. Store materials in a dry area, protected from freezing, staining, contamination or damage.
- C. Do not exceed structural loading with workers or installation materials.

1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's limits.
 1. Review manufacturers installation instructions and warranty requirements.

1.8 WARRANTY

- A. Provide manufacturer's standard warranty covering defective materials, workmanship and performance including the following Warranty Periods:
 1. Leak Free Warranty: 5 years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Sunoptics Prismatic Skylights , which is located at: P.O. Box 780249,

Tallassee, AL 36078; available exclusively through Logistics Lighting with an extended warranty and National Account pricing. Contact for quotes or product questions: Sales@LogisticsLighting.com or 307-633-9696 or Toll-Free at 844-455-7283 website: www.LogisticsLighting.com

- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 SIGNATURE SERIES PRISMATIC SKYLIGHTS

- A. Signature Series Dome, Fixed Skylights: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:
 - 1. FM Approval #4431.
 - 2. High Velocity Hurricane Zone (HVHZ) Approved.
 - 3. AAMA/WDMA/CSA101/I.S.2/A440.
 - 4. Dimensions: _____.
 - 5. Dimensions: As shown on the Drawings.
 - 6. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
 - 7. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
 - 8. Glazing: Triple Glazed (TGZ).
 - a. White/White/Clear: 0.26 Solar Heat Gain Coefficient (SHGC), 0.57 U-Value, 0.62 Visible Light Transmission (VLT).
 - b. Lens Colors: LENSWHWHWH: White / White / White.
 - c. Lens Colors: LENSCLCLCL: Clear / Clear / Clear.
 - d. Lens Colors: LENSCLWHCL: Clear / White / Clear.
 - e. Lens Colors: LENSWHCLWH: White / Clear / White.
 - f. Lens Colors: LENSCLWHWH: Clear / White / White.
 - g. Lens Colors: LENSWHCLCL: White / Clear / Clear.
 - 9. Frame Type:
 - a. 800MD: Standard Frame.
 - b. 800SC: So-Cal Skylight.
 - 10. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.
- B. Signature Series Dome, Continuous Vented Skylights: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:
 - 1. Dimensions: _____.
 - 2. Dimensions: As shown on the Drawings.
 - 3. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light

- Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
- 4. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.64 Visible Light Transmission (VLT)
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
- 5. Frame Type:
 - a. 805SC 1BL: 1 Blade Continuous Vent.
 - b. 805SC 2BL: 2 Blade Continuous Vent.
 - c. 805SC 3BL: 3 Blade Continuous Vent.
 - d. 805SC 4BL: 4 Blade Continuous Vent.
 - e. 805SC 5BL: 5 Blade Continuous Vent.
 - f. 805SC 6BL: 6 Blade Continuous Vent.
 - g. 805SC 7BL: 7 Blade Continuous Vent.
 - h. 805SC 8BL: 8 Blade Continuous Vent.
 - i. 805SC 9BL: 9 Blade Continuous Vent.
 - j. 805SC 10BL: 10 Blade Continuous Vent.
- 6. Provide insect screen on vented units.
- 7. Frame Finish: MI: Mill.

2.3 DOUBLE HIP PRISMATIC SKYLIGHTS

- A. Double Hip Fixed Skylights, Model 800MD: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:
 - 1. AAMA/WDMA/CSA101/I.S.2/A440.
 - 2. Dimensions: _____.
 - 3. Dimensions: As shown on the Drawings.
 - 4. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
 - 5. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
 - 6. Glazing: Triple Glazed (TGZ).
 - a. White/White/Clear: 0.26 Solar Heat Gain Coefficient (SHGC), 0.57 U-Value, 0.62 Visible Light Transmission (VLT).
 - b. Lens Colors: LENSWHWHWH: White / White / White.
 - c. Lens Colors: LENSCLCLCL: Clear / Clear / Clear.
 - d. Lens Colors: LENSCLWHCL: Clear / White / Clear.
 - e. Lens Colors: LENSWHCLWH: White / Clear / White.
 - f. Lens Colors: LENSCLWHWH: Clear / White / White.

- g. Lens Colors: LENSWHCLCL: White / Clear / Clear.
 - 7. Frame Type: 800MD: Standard Frame.
 - 8. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.
- B. Double Hip Manually Venting Skylights, Model 840B: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:
- 1. Dimensions: _____.
 - 2. Dimensions: As shown on the Drawings.
 - 3. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
 - 4. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
 - 5. Glazing: Triple Glazed (TGZ).
 - a. White/White/Clear: 0.26 Solar Heat Gain Coefficient (SHGC), 0.57 U-Value, 0.62 Visible Light Transmission (VLT).
 - b. Lens Colors: LENSWHWHWH: White / White / White.
 - c. Lens Colors: LENSCLCLCL: Clear / Clear / Clear.
 - d. Lens Colors: LENSCLWHCL: Clear / White / Clear.
 - e. Lens Colors: LENSWHCLWH: White / Clear / White.
 - f. Lens Colors: LENSCLWHWH: Clear / White / White.
 - g. Lens Colors: LENSWHCLCL: White / Clear / Clear.
 - 6. Frame Type: 840B Manually Venting Frame.
 - 7. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.
- C. Double Hip Continuously Venting Skylights, Model 805SC: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:
- 1. Dimensions: _____.
 - 2. Dimensions: As shown on the Drawings.
 - 3. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
 - 4. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.68 Visible Light Transmission (VLT).

- b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
- 5. Frame Type:
 - a. 805SC 1BL: 1 Blade Continuous Vent.
 - b. 805SC 2BL: 2 Blade Continuous Vent.
 - c. 805SC 3BL: 3 Blade Continuous Vent.
 - d. 805SC 4BL: 4 Blade Continuous Vent.
 - e. 805SC 5BL: 5 Blade Continuous Vent.
 - f. 805SC 6BL: 6 Blade Continuous Vent.
 - g. 805SC 7BL: 7 Blade Continuous Vent.
 - h. 805SC 8BL: 8 Blade Continuous Vent.
 - i. 805SC 9BL: 9 Blade Continuous Vent.
 - j. 805SC 10BL: 10 Blade Continuous Vent.
- 6. Provide insect screen on vented units.
- 7. Frame Finish: MI: Mill.

2.4 PYRAMID PRISMATIC SKYLIGHTS

- A. Pyramid Fixed Skylights, Model 800MD: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:
 - 1. AAMA/WDMA/CSA101/I.S.2/A440.
 - 2. Dimensions: _____.
 - 3. Dimensions: As shown on the Drawings.
 - 4. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
 - 5. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
 - 6. Glazing: Triple Glazed (TGZ).
 - a. White/White/Clear: 0.26 Solar Heat Gain Coefficient (SHGC), 0.57 U-Value, 0.62 Visible Light Transmission (VLT).
 - b. Lens Colors: LENSWHWHWH: White / White / White.
 - c. Lens Colors: LENSCLCLCL: Clear / Clear / Clear.
 - d. Lens Colors: LENSCLWHCL: Clear / White / Clear.
 - e. Lens Colors: LENSWHCLWH: White / Clear / White.
 - f. Lens Colors: LENSCLWHWH: Clear / White / White.
 - g. Lens Colors: LENSWHCLCL: White / Clear / Clear.
 - 7. Frame Type:
 - a. 800MD: Standard Frame.
 - 8. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.

- c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.
- B. Pyramid Manually Venting Skylights, Model 840B: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:
- 1. Dimensions: _____.
 - 2. Dimensions: As shown on the Drawings.
 - 3. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
 - 4. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
 - 5. Glazing: Triple Glazed (TGZ).
 - a. White/White/Clear: 0.26 Solar Heat Gain Coefficient (SHGC), 0.57 U-Value, 0.62 Visible Light Transmission (VLT).
 - b. Lens Colors: LENSWHWHWH: White / White / White.
 - c. Lens Colors: LENSCLCLCL: Clear / Clear / Clear.
 - d. Lens Colors: LENSCLWHCL: Clear / White / Clear.
 - e. Lens Colors: LENSWHCLWH: White / Clear / White.
 - f. Lens Colors: LENSCLWHWH: Clear / White / White.
 - g. Lens Colors: LENSWHCLCL: White / Clear / Clear.
 - 6. Frame Type: 840B Manually Venting Frame.
 - 7. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.
- C. Pyramid Continuously Venting Skylights, Model 805SC: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:
- 1. Dimensions: _____.
 - 2. Dimensions: As shown on the Drawings.
 - 3. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
 - 4. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.

- f. Lens Colors: LENSCLCL: Clear / Clear.
- 5. Frame Type:
 - a. 805SC 1BL: 1 Blade Continuous Vent.
 - b. 805SC 2BL: 2 Blade Continuous Vent.
 - c. 805SC 3BL: 3 Blade Continuous Vent.
 - d. 805SC 4BL: 4 Blade Continuous Vent.
 - e. 805SC 5BL: 5 Blade Continuous Vent.
 - f. 805SC 6BL: 6 Blade Continuous Vent.
 - g. 805SC 7BL: 7 Blade Continuous Vent.
 - h. 805SC 8BL: 8 Blade Continuous Vent.
 - i. 805SC 9BL: 9 Blade Continuous Vent.
 - j. 805SC 10BL: 10 Blade Continuous Vent.
- 6. Provide insect screen on vented units.
- 7. Frame Finish: MI: Mill.

2.5 MULTI-LIGHT PRISMATIC SKYLIGHTS

- A. Double Hip Multi-Light Skylights, Model 800SB: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:
 - 1. AAMA/WDMA/CSA/101/I.S.2/A440.
 - 2. Dimensions: _____.
 - 3. Dimensions: As shown on the Drawings.
 - 4. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
 - 5. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
 - 6. Glazing: Triple Glazed (TGZ).
 - a. White/White/Clear: 0.26 Solar Heat Gain Coefficient (SHGC), 0.57 U-Value, 0.62 Visible Light Transmission (VLT).
 - b. Lens Colors: LENSWHWHWH: White / White / White.
 - c. Lens Colors: LENSCLCLCL: Clear / Clear / Clear.
 - d. Lens Colors: LENSCLWHCL: Clear / White / Clear.
 - e. Lens Colors: LENSWHCLWH: White / Clear / White.
 - f. Lens Colors: LENSCLWHWH: Clear / White / White.
 - g. Lens Colors: LENSWHCLCL: White / Clear / Clear.
 - 7. Frame Type: 800SB Standard Frame for MLT Multi-Lite.
 - 8. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.
- B. Pyramid Multi-Light Skylights, Model 800SB: Designed to provide the maximum amount of light transmission into the building while maintaining 100 percent light diffusion and meeting the following criteria:

1. AAMA/WDMA/CSA/101/I.S.2/A440.
2. Dimensions: _____.
3. Dimensions: As shown on the Drawings.
4. Glazing: Single Glazed (SGZ).
 - a. White: 0.68 Solar Heat Gain Coefficient (SHGC), 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
5. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.42 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.31 Solar Heat Gain Coefficient (SHGC), 0.70 U-Value, 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
6. Glazing: Triple Glazed (TGZ).
 - a. White/White/Clear: 0.26 Solar Heat Gain Coefficient (SHGC), 0.57 U-Value, 0.62 Visible Light Transmission (VLT).
 - b. Lens Colors: LENSWHWHWH: White / White / White.
 - c. Lens Colors: LENSCLCLCL: Clear / Clear / Clear.
 - d. Lens Colors: LENSCLWHCL: Clear / White / Clear.
 - e. Lens Colors: LENSWHCLWH: White / Clear / White.
 - f. Lens Colors: LENSCLWHWH: Clear / White / White.
 - g. Lens Colors: LENSWHCLCL: White / Clear / Clear.
7. Frame Type: 800SB Standard Frame for MLT Multi-Lite.
8. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.

2.6 CURB TOPPER SKYLIGHTS

- A. Model 800MD Curb Mounted, Curb Topper Skylights: Structural and insulated wood and metal curbs to eliminate the need for interior structural reinforcement and equipped with Safety Security Grid to comply with OSHA 1926.502 and 1910 and the following:
 1. AAMA/WDMA/CSA/101/I.S.2/A440.
 2. OD Curb Dimensions: _____.
 3. Dimensions: As shown on the Drawings.
 4. Double Glazing:
 - a. CT 1 White: 0.20 Solar Heat Gain Coefficient (SHGC), 0.36 U-Value, 0.60 Visible Light Transmission (VLT).
 - b. Double Glazing Lens Colors: LENSWHCL: White / Clear.
 - c. Double Glazing Lens Colors: LENSCLWH: Clear / White.
 - d. Double Glazing Lens Colors: LENSWHWH: White / White.
 - e. Double Glazing Lens Colors: LENSCLCL: Clear / Clear.
 5. Frame Type:
 - a. 800MD: Standard Frame.
 - b. 800MDE: Oversized Frame.
 6. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.

2.7 SMOKE VENTS

- A. Model 870B, Daylighting Smoke Vents: Prefabricated, venting daylighting smoke vents with fusible link for use in industrial and commercial buildings where required by the local building code and the following:
1. UL Listed.
 2. FM Approval # 4430 with curb mounted design.
 3. Energy Requirements: Glazing material shall have maximum light distribution per Addendum D of ASHRAE 90.1, where the diffusing qualities have a minimum haze factor of 90 percent or greater. The combined inner/outer lens target values shall be as follows:
 - a. Light Transmission: 60 to 68 percent.
 - b. Diffusion / Haze Factor: 100 percent.
 4. Hail Resistance Level:
 - a. Class 1 as tested by certified engineering firm.
 - b. Class 3 as tested by certified engineering firm.
 5. Snow Load Resistance Level:
 - a. 10 pound.
 - b. 25 pound.
 - c. 30 pound.
 6. Dimensions: _____.
 7. Dimensions: As shown on the Drawings.
 8. Frame: ASTM B221 alloy 6063-T5 extruded aluminum frame with extruded aluminum dome retaining angle, Insulated thermal break, and integral condensate gutter and manufacturers standard weatherproofing accessories in the following profile:
 - a. Signature Series dome.
 - b. Double Hip.
 - c. As indicated on the Drawings.
 9. Glazing: Single Glazed (SGZ).
 - a. White: 0.74 Visible Light Transmission (VLT).
 - b. Lens Color: LENSWH: White.
 - c. Lens Color: LENSCL: Clear.
 10. Glazing: Double Glazed (DGZ).
 - a. Clear/White: 0.68 Visible Light Transmission (VLT).
 - b. White/White: 0.64 Visible Light Transmission (VLT).
 - c. Lens Colors: LENSWHCL: White / Clear.
 - d. Lens Colors: LENSCLWH: Clear / White.
 - e. Lens Colors: LENSWHWH: White / White.
 - f. Lens Colors: LENSCLCL: Clear / Clear.
 11. Fusible Link: Mechanism includes gas shocks and exterior manual release cable for testing and the following temperature rating:
 - a. Minimum 165 degrees F (74 degrees C).
 - b. Minimum 212 degrees F (100 degrees C).
 - c. Minimum 286 degrees F (141 degrees C).
 - d. Minimum 360 degrees F (182 degrees C).
 - e. Minimum 370 degrees F (188 degrees C).
 - f. Minimum 386 degrees F (197 degrees C).
 12. Operation:
 - a. Designed to remain tightly sealed against 30 lbs /sq. ft (147 kg/sq. m) internal uplift pressure until triggered by UL listed fusible link or opened manually from interior level. When released, doors shall be capable of opening against a 10 lbs./sq. ft (49 kg/sq. m) external snow or wind load and lock in open position.
 - b. Opening Angle: Minimum 90 degrees.
 13. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.

- c. BZ: Bronze.
- d. CF: Custom Finish as selected by the Architect.

2.8 LIGHTFLEX DAYLIGHTING DEVICES

- A. Model 800SLFT, Tubular System, LightFlex Daylighting Devices: Daylighting devices bring natural light into suspended, finished ceiling applications that do not have direct access to the roof while meeting the following criteria:
 - 1. FM Approved, with polycarbonate.
 - 2. High Velocity Hurricane Zone (HVHZ) Approved, with CC1CC2.
 - 3. AAMA Certified.
 - 4. NFRC Certified.
 - 5. Performance: Optic sphere increases daylight conveyance, 98 percent reflective MIRO-SILVER interior light well with greater than 99 percent specular quality, adjustable elbows to bypass obstructions typically yield the following values:
 - a. Solar Heat Gain Coefficient (SHGC): 0.24.
 - b. U-Value: 0.40.
 - c. Visible Light Transmission (VLT): 0.40 to 0.68.
 - 6. Frame: 6063-T5 extruded aluminum frame with mitered and welded corners, and integral condensation and weepage gutters to drain moisture to the outside.
 - 7. Roof Curb:
 - a. Outside Dimensions: 25 by 25 inch (635 by 635 mm).
 - b. Inside Dimensions: 22 by 22 inch (559 by 559 mm).
 - c. Height: 8 inch (203 mm).
 - d. Height: 14 inch (356 mm).
 - e. Height: As shown on the Drawings.
 - 8. Standard Kit includes the following:
 - a. Signature Series skylight assembly.
 - b. Optic sphere.
 - c. Curb transition.
 - d. 16 inch (406 mm) roof curb top tube.
 - e. Curb with curb sealing tape.
 - f. 24 inch (610 mm) light well tubes one and two.
 - g. Round to square transition.
 - h. Ceiling diffuser.
 - 9. Provide with the following options:
 - a. Single blade louver.
 - b. Louver extension tube.
 - c. Adjustable 15 degree angle tube.
 - 10. Glazing: Single Glazed (SGZ).
 - 11. Glazing: Double Glazed (DGZ).
 - 12. Skylight Lens Material: CC1CC2 Polycarbonate.
 - 13. Skylight Lens Material: CC1 Polycarbonate.
 - 14. Skylight Lens Material: CC2CL1 Acrylic Class 1.
 - 15. Skylight Lens Material: CC2CL3 Acrylic Class 3.
 - 16. Optic Sphere Lens Material: Acrylic prismatic.
 - 17. Optic Sphere Lens Material: Polycarbonate prismatic.
 - 18. Diffuser Lens Style: TLED Shadowbox lens assembly.
 - 19. Diffuser Lens Style: A19 lens assembly.
 - 20. Diffuser Lens Style: TLED Microprism lens assembly.
 - 21. Diffuser Lens Style: 24 by 24 inch (600 by 600 mm) ceiling grid pattern.
 - 22. Diffuser Lens Style: Magellan white flat round lens.
 - 23. Diffuser Lens Style: Magellan white prismatic round lens.
 - 24. Diffuser Lens Style: ALLED Troffer.
 - 25. Light Well Length: 4 foot (1219 mm) shaft.
 - 26. Light Well Length: 6 foot (1829 mm) shaft.

27. Light Well Length: 8 foot (2438 mm) shaft.
 28. Light Well Length: 10 foot (3048 mm) shaft.
 29. Light Well Length: 12 foot (3658 mm) shaft.
 30. Light Well Length: 14 foot (4267 mm) shaft.
 31. Light Well Length: 16 foot (4877 mm) shaft.
 32. Light Well Length: 18 foot (5486 mm) shaft.
 33. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.
 34. Provide with the following options:
 - a. Light louver.
 - b. 2 elbows, each 15-1/2 inch (394 mm) long.
 - c. 4 elbows, each 15-1/2 inch (394 mm) long.
 - d. Suspension wire kit.
 - e. Drywall grid adaptor.
 - f. Security bar.
 - g. CCT color changing lens.
- B. Model 800SLF, SquareSystem, LightFlex Daylighting Devices: Daylighting devices bring natural light into suspended, finished ceiling applications that do not have direct access to the roof while meeting the following criteria:
1. AAMA Certified.
 2. NFRC Certified.
 3. Performance: Optic sphere increases daylight conveyance, 98 percent reflective MIRO-SILVER interior light well with greater than 99 percent specular quality, adjustable elbows to bypass obstructions typically yield the following values:
 - a. Solar Heat Gain Coefficient (SHGC): 0.24.
 - b. U-Value: 0.40.
 - c. Visible Light Transmission (VLT): 0.40 to 0.68.
 4. Frame: 6063-T5 extruded aluminum frame with mitered and welded corners, and integral condensation and weepage gutters to drain moisture to the outside.
 5. Unit Size: 2 by 4 foot (609 by 1218 mm).
 6. Unit Size: 4 by 4 foot (1218 by 1218 mm).
 7. Unit Size: As shown on the Drawings.
 8. Roof Curb: As recommended by the manufacturer.
 9. Skylight Lens Material: CC1CC2 Polycarbonate / Acrylic.
 10. Skylight Lens Material: CC1 Polycarbonate.
 11. Skylight Lens Material: CC2CL1 Acrylic Class 1.
 12. Skylight Lens Material: CC2CL3 Acrylic Class 3.
 13. Glazing: Single Glazed (SGZ).
 14. Glazing: Double Glazed (DGZ).
 15. Skylight Lens Colors: LENSWH - White.
 16. Skylight Lens Colors: LENSCL: Clear.
 17. Skylight Lens Colors: LENSWHCL - White / Clear.
 18. Skylight Lens Colors: LENSCLWH: Clear / White.
 19. Skylight Lens Colors: LENSWHWH: White / White.
 20. Skylight Lens Colors: LENSCLCL: Clear / Clear.
 21. Diffuser Lens Material: Acrylic.
 22. Diffuser Lens Material: Polycarbonate.
 23. Diffuser Lens Color: White prismatic.
 24. Diffuser Lens Color: Clear prismatic.
 25. Diffuser Lens Style: ACLED Troffer lens assembly.
 26. Diffuser Lens Style: Acrylic.
 27. Diffuser Lens Style: TLED Shadowbox lens assembly.

28. Diffuser Lens Style: A19 lens assembly.
 29. Diffuser Lens Style: TLED Microprism lens assembly.
 30. Diffuser Lens Style: TLED Satin lens assembly.
 31. Diffuser Lens Style: TLED Troffer with prismatic lens flat assembly.
 32. Shaft Length: 2 foot (609 mm).
 33. Shaft Length: 3 foot (914 mm).
 34. Shaft Length: 4 foot (1219 mm).
 35. Shaft Length: 5 foot (1524 mm).
 36. Shaft Length: 6 foot (1829 mm).
 37. Shaft Length: 7 foot (2133 mm).
 38. Shaft Length: 8 foot (2438 mm).
 39. Shaft Length: 9 foot (2743 mm).
 40. Shaft Length: 10 foot (3048 mm).
 41. Shaft Length: 11 foot (3352 mm).
 42. Shaft Length: 12 foot (3658 mm).
 43. Shaft Length: 13 foot (3962 mm).
 44. Shaft Length: 14 foot (4267 mm).
 45. Shaft Length: 15 foot (4572 mm).
 46. Shaft Length: 16 foot (4877 mm).
 47. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.
 48. Provide with the following options:
 - a. Factory Mutual Approved (FM).
 - b. High Velocity Hurricane Zone (HVHZ).
 - c. Insulated thermal break.
 - d. No insulated thermal break.
 - e. Weather sweep.
 - f. No weather sweep.
 - g. No installation screw.
 - h. 24 by 24 inch (609 by 609 mm) ceiling grid pattern.
 - i. LightFlex louver.
- C. Model SLFTL, Tubular System featuring Tunable White LEDs, LightFlex Daylighting Devices: Daylighting devices bring natural light into suspended, finished ceiling applications that do not have direct access to the roof while meeting the following criteria:
1. FM Approved, with polycarbonate.
 2. High Velocity Hurricane Zone (HVHZ) Approved, with CC1CC2.
 3. AAMA Certified.
 4. NFRC Certified.
 5. Frame: 6063-T5 extruded aluminum frame with mitered and welded corners, and integral condensation and weepage gutters to drain moisture to the outside.
 6. Roof Curb:
 - a. Insulated Curb, Aluminum: Aluminum with rigid insulation.
 - b. Outside Dimensions: _____.
 - c. Inside Dimensions: _____.
 - d. Height: 8 inch (203 mm).
 - e. Height: 14 inch (356 mm).
 - f. Height: As shown on the Drawings.
 7. LED Lighting: A+ capable luminaire, provides consistent color appearance and out-of-the-box control compatibility with simple commissioning.
 - a. Tunable: nLight enabled, allows for digital light color temperature control, 2700k to 6500k.
 - b. Light Sensor: nLight enabled, controls daylight harvesting and closes louvers at

- night to increase performance and reduce light pollution.
8. Standard Kit includes the following:
 - a. Signature Series skylight assembly.
 - b. Optic sphere.
 - c. Curb transition.
 - d. Curb.
 - e. 18 inches (457 mm) roof curb top tube.
 - f. nES ADCX LFT and CAT 5 Cable.
 - g. 24 inches (610 mm) light well tubes one and two.
 - h. Lightflex LED.
 - i. Round to square transition.
 - j. Troffer lens.
 - k. Weather stripping.
 - l. Fasteners.
 - m. Foil tape.
 - n. Single blade louver.
 - o. Remote driver enclosure.
 9. Glazing: Single Glazed (SGZ).
 10. Glazing: Double Glazed (DGZ).
 11. Skylight Lens Material: CC1 Polycarbonate.
 12. Skylight Lens Material: CC1CC2 Polycarbonate/Acrylic.
 13. Skylight Lens Material: CC2CL1 Acrylic Class 1.
 14. Skylight Lens Material: CC2CL3 Acrylic Class 3.
 15. Optic Sphere Lens Material: Acrylic prismatic.
 16. Diffuser Lens Style: TLED shadowbox lens assembly.
 17. Diffuser Lens Style: A19 lens assembly.
 18. Diffuser Lens Style: TLED microprism lens assembly.
 19. Diffuser Lens Style: TLSATIN satin lens assembly.
 20. Diffuser Lens Style: ACL ACLED troffer lens assembly.
 21. Diffuser Lens Style: ALLED troffer.
 22. Light Well Length: 4 foot (1219 mm) shaft.
 23. Light Well Length: 6 foot (1829 mm) shaft.
 24. Light Well Length: 8 foot (2438 mm) shaft.
 25. Light Well Length: 10 foot (3048 mm) shaft.
 26. Light Well Length: 12 foot (3658 mm) shaft.
 27. Light Well Length: 14 foot (4267 mm) shaft.
 28. Light Well Length: 16 foot (4877 mm) shaft.
 29. Light Well Length: 18 foot (5486 mm) shaft.
 30. Frame Finish:
 - a. MI: Mill.
 - b. WH: White.
 - c. BZ: Bronze.
 - d. CF: Custom Finish as selected by the Architect.
 31. Provide with the following options:
 - a. Adjustable Elbows, One Set: 2 elbows, each 15-1/2 inch (394 mm) long.
 - b. Adjustable Elbows, Two Sets: 4 elbows, each 15-1/2 inch (394 mm) long.
 - c. Suspension wire kit.
 - d. Security bar.
 32. Accessories:
 - a. Louver Control.
 - b. On/Off, Intensity Adjustment & CCT Control.
 - c. Small Motion 360 degree, ceiling.
 - d. Large Motion 360 degree, ceiling.

2.9 ACCESSORIES

- A. Installation Screws: #12 x 1-1/2 inch (38 mm) 300 series stainless steel screws with neoprene stainless steel bonded washers in quantity recommended by the manufacturer.
- B. Washers: Neoprene/stainless steel bonded washers.
- C. Metal Building Curb, Model AMBC-1: Insulated metal building curb, 18 ga. galvalume, full height mitered and welded corners, cell caps supplied loose for field location, including fiberglass insulation, integral cricket water diverter.
- D. Galvanized Insulated Curb, Model ARC-3: Galvanized steel with white painted interior, fiberglass insulation and pressure treated wood nailer for mounting skylight. OSHA 1910 and 1926.502 compliant with wire mesh and welded security guard.
- E. Galvanized Insulated Curb, Model ARC-6: Galvanized steel with white painted interior, and pressure treated wood nailer for mounting skylight. OSHA 1910 and 1926.502 compliant with wire mesh and welded security guard.
- F. Wood Curb: 2X Douglas fir lumber with corners joined using 18 gauge galvanized strap, interior polyester white liner, and pre-mounted angle clips.
- G. Safety Security Guard, Model CLPOG: Clip on guard of galvanized cold rolled steel, to meet OSHA 1910.28(b)(3) and 1910.29(e) requirements.
- H. Grid Guard: Drop in steel guard provided with screws, SSG welded to Z-frame on all four sides. Comply with manufacturers installation details.

2.10 FABRICATION

- A. Fabricated frames from 6063 T6 aluminum with integral condensation and weeping gutters to drain interior moisture to the outside.
- B. Skylights shall be factory assembled and glazed ready for installation, pre-drilled for anchorage to roof curbs.
- C. Fabricate skylights weather tight and free of visual distortions and defects.
- D. Multi-glazed units include Insulated Thermal Break (ITBR), Curb Seal Tape, Weather Sweep (WSW) and screws.
- E. Protect exterior drip counter flashing and drainage ports from weather and air-borne debris.
- F. Miter and full penetration weld all corners of curb and retaining frames with glazing separated from the skylight frame with a silicone seal along the full perimeter of the retaining frame.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions:
 - 1. Confirm work by others is installed per the project requirements. Do not cover work by others prior to inspection or acceptance.
 - 2. Do not begin installation until substrates have been properly prepared.
 - 3. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- B. Do not proceed until unacceptable conditions are corrected.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions and in proper relationship with adjacent construction. Test for leaks as recommended by manufacturer.

3.4 CLEANING

- A. Remove all debris from the project site in accordance with the Owner's construction waste management requirements.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION