

## **SECTION 08620—UNIT SKYLIGHTS**

### **Curb Mount (CM) & Curb Mount Pyramid (CM-PYR)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate domed skylight work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Single or double domed acrylic and/or polycarbonate unit skylights complete with curb mount frame for installation on flashed curb by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

### 1.06 Manufacturer:

Non-thermally broken curb mount skylight(s) shall be American Skylites model CM (standard dome) or CM-PYR (pyramid dome) as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### 2.01 Materials:

#### A. Curb Mount Frame:

Curb mount frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Curb mount frame shall have an integral condensation gutter and weep holes for sufficient drainage to the exterior. All corners shall be welded using the heliarc process.

#### B. Acrylic and/or Polycarbonate Domes:

Acrylic and/or polycarbonate domes shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom dome colors and individual dome thickness as selected by architect.

#### C. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### D. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

#### E. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### 2.02 Assembly:

All skylights shall be factory assembled and factory glazed.

## **Part 3 Installation:**

### 3.01 Site Inspection:

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### 3.02 Installation:

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

#### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### 3.03 Protection:

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### 3.04 Cleaning:

#### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

#### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Thermal Break Curb Mount (TCM) & Pyramid (TCM-PYR)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the thermal break curb mount acrylic/polycarbonate domed skylight work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Double domed acrylic and/or polycarbonate unit skylights complete with polyurethane thermal break curb mount frame for installation on flashed curb by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

#### 1.06 Manufacturer:

Thermally broken curb mount skylight(s) shall be American Skylites model TCM (standard dome) or TCM-PYR (pyramid dome) as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

#### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

### **Part 2: Products:**

#### 2.01 Materials:

##### A. Curb Mount Frame:

Curb mount frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Curb mount frame shall have a polyurethane thermal break to reduce thermal transfer and reduce condensation on the interior of the frame. Curb mount frame shall have an integral condensation gutter. All corners shall be welded using the heliarc process.

##### B. Acrylic and/or Polycarbonate Domes:

Acrylic and/or polycarbonate domes shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom dome colors and individual dome thickness as selected by architect.

##### C. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

##### D. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

##### E. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

#### 2.02 Assembly:

All skylights shall be factory assembled and factory glazed.

### **Part 3 Installation:**

#### 3.01 Site Inspection:

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### 3.02 Installation:

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

#### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### 3.03 Protection:

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### 3.04 Cleaning:

#### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

#### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Self Flashing (SF) & Self Flashing Pyramid (SF-PYR)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate domed skylight work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Single or double domed acrylic and/or polycarbonate unit skylights complete with 4", 6", 9", or 12" curb height (as specified) with integral 3" counter flashing.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

### 1.06 Manufacturer:

Non-thermally broken self flashing skylight(s) shall be American Skylites model SF (standard dome) or SF-PYR (pyramid dome) as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### 2.01 Materials:

#### A. Curb and Curb Frame:

Curb and curb frame shall be fabricated from 6063-T5/T6 aluminum extrusion. Thickness shall be minimum .060-4", .090-6" or .060 curb frame with .050 curb wall - 9" and 12". Curb frame shall have an integral condensation gutter and weep holes for sufficient drainage to the exterior. All corners shall be welded using the heliarc process.

#### B. Acrylic and/or Polycarbonate Domes:

Acrylic and/or polycarbonate domes shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom dome colors and individual dome thickness as selected by architect.

#### C. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### D. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

#### E. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### 2.02 Assembly:

All skylights shall be factory assembled and factory glazed.

## **Part 3 Installation:**

### 3.01 Site Inspection:



Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### 3.02 Installation:

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

#### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### 3.03 Protection:

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### 3.04 Cleaning:

#### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

#### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Insulated Self Flashing (ISF) & Pyramid (ISF-PYR)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate domed skylight work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Double domed acrylic and/or polycarbonate unit skylights complete with 1” fiberglass insulated 9” or 12” curb height (as specified) with integral 3” counter flashing.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

### 1.06 Manufacturer:

Insulated self flashing skylight(s) shall be American Skylites model ISF (standard dome) or ISF-PYR (pyramid dome) as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### 2.01 Materials:

#### A. Curb and Curb Frame:

Curb and curb frame shall be fabricated from 6063-T5/T6 aluminum extrusion. Curb frame shall be minimum .060 with .032 outer curb wall/.032 inner curb wall with 1” fiberglass insulation. Curb frame shall have an integral condensation gutter and weep holes for sufficient drainage to the exterior. All corners shall be welded using the heliarc process.

#### B. Acrylic and/or Polycarbonate Domes:

Acrylic and/or polycarbonate domes shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom dome colors and individual dome thickness as selected by architect.

#### C. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### D. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

#### E. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### 2.02 Assembly:

All skylights shall be factory assembled and factory glazed.

## **Part 3 Installation:**

### 3.01 Site Inspection:

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### 3.02 Installation:

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

#### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### 3.03 Protection:

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### 3.04 Cleaning:

#### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

#### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Thermal Break Self Flashing (TSF) & Pyramid (TSF-PYR)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate domed skylight work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Double domed acrylic and/or polycarbonate unit skylights complete with thermal break and 1" fiberglass insulated 4", 9" or 12" curb height (as specified) with integral 3" counter flashing.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

### 1.06 Manufacturer:

Thermally broken and insulated self flashing skylight(s) shall be American Skylites model TSF (standard dome) or TSF-PYR (pyramid dome) as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### 2.01 Materials:

#### A. Curb and Curb Frame:

Curb and curb frame shall be fabricated from 6063-T5/T6 aluminum extrusion. 4" curb and curb frame shall be minimum .070 with 2 polyurethane thermal breaks to reduce thermal transfer and reduce condensation on the interior of the frame and 1" fiberglass insulation. 9" and 12" curb frames shall be minimum .060 with .032 outer curb wall/.032 inner curb wall with 2 polyurethane thermal breaks to reduce thermal transfer and reduce condensation on the interior of the frame and 1" fiberglass insulation. Curb frame shall have an integral condensation gutter. All corners shall be welded using the heliarc process.

#### B. Acrylic and/or Polycarbonate Domes:

Acrylic and/or polycarbonate domes shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom dome colors and individual dome thickness as selected by architect.

#### C. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### D. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

#### E. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### 2.02 Assembly:

All skylights shall be factory assembled and factory glazed.

## **Part 3 Installation:**

### 3.01 Site Inspection:

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### 3.02 Installation:

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

#### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### 3.03 Protection:

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### 3.04 Cleaning:

#### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

#### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Barrel Vault Skylight System (BVCM)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate domed skylight system work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Double domed acrylic and/or polycarbonate unit skylight system complete with thermally broken curb mount frame for installation on flashed curb by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.



### 1.06 Manufacturer:

Thermally broken Barrel Vault Curb Mount skylight system shall be American Skylites model BVCM as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights and/or skylight systems, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### 2.01 Materials:

#### A. Curb Mount Frame:

Curb mount frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Curb mount frame shall have a polyurethane thermal break to reduce thermal transfer and reduce condensation on the interior of the frame. Curb mount frame shall have an integral condensation gutter and weep holes for sufficient drainage to the exterior. All corners shall be welded using the heliarc process.

#### B. Glazing track, mullions and rafters:

Glazing track, mullions and rafters shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .080. All corners shall be welded using the heliarc process.

#### C. Acrylic and/or Polycarbonate Domes:

Acrylic and/or polycarbonate domes shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom dome colors and individual dome thickness as selected by architect.

#### D. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### E. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

#### F. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### 2.02 Assembly:

All skylights shall be factory assembled\* and factory glazed. (\*partial field assembly required on larger units)

## **Part 3 Installation:**

### **3.01 Site Inspection:**

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### **3.02 Installation:**

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

#### **A. Sealants:**

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### **3.03 Protection:**

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### **3.04 Cleaning:**

#### **A. General Cleaning:**

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

#### **B. Final Cleaning:**

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Half Round Skylight System (HRCM)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate domed skylight system work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Double domed acrylic and/or polycarbonate unit skylight system complete with curb mount frame for installation on flashed curb by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

## 1.06 Manufacturer:

Thermally broken Half Round Curb Mount skylight system shall be American Skylites model HRCM as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

## 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights and/or skylight systems, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### 2.01 Materials:

#### A. Curb Frame:

Thermally broken Curb frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Curb mount frame shall have a polyurethane thermal break to reduce thermal transfer and reduce condensation on the interior of the frame. Curb frame shall have an integral condensation gutter and weep holes for sufficient drainage to the exterior. All corners shall be welded using the heliarc process.

#### B. Glazing track, mullions and rafters:

Glazing track, mullions and rafters shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .080. All corners shall be welded using the heliarc process.

#### C. Acrylic and/or Polycarbonate Domes:

Acrylic and/or polycarbonate domes shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom dome colors and individual dome thickness as selected by architect.

#### D. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### E. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

#### F. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### 2.02 Assembly:

All skylights shall be factory assembled\* and factory glazed. (\*partial field assembly required on larger units)

## **Part 3 Installation:**

### **3.01 Site Inspection:**

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### **3.02 Installation:**

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

#### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### **3.03 Protection:**

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### **3.04 Cleaning:**

#### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

#### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Ridge Lite Skylight System (RLCM)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate glazed skylight system work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Single or double glazed acrylic and/or polycarbonate unit skylight system complete with curb mount frame for installation on flashed curb by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

### 1.06 Manufacturer:

Thermally broken Ridge Lite Curb Mount skylight system shall be American Skylites model RLCM as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights and/or skylight systems, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### 2.01 Materials:

#### A. Curb Mount Frame:

Thermally broken Curb mount frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Curb mount frame shall have a polyurethane thermal break to reduce thermal transfer and reduce condensation on the interior of the frame. Curb frame shall have an integral condensation gutter and weep holes for sufficient drainage to the exterior. All corners shall be welded using the heliarc process.

#### B. Glazing track, mullions and rafters:

Glazing track, mullions and rafters shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .080. All corners shall be welded using the heliarc process.

#### C. Acrylic and/or Polycarbonate Glazing:

Acrylic and/or polycarbonate glazing shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Glazing shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom glazing colors and individual glazing thickness as selected by architect.

#### D. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### E. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

#### F. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### 2.02 Assembly:

All skylights shall be factory assembled\* and factory glazed. (\*partial field assembly required on larger units)

## **Part 3 Installation:**

### **3.01 Site Inspection:**

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### **3.02 Installation:**

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

#### **A. Sealants:**

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### **3.03 Protection:**

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### **3.04 Cleaning:**

#### **A. General Cleaning:**

Installer shall remove all protective coverings from frames and/or glazing and shall leave installation free from heavy debris and/or sealant markings.

#### **B. Final Cleaning:**

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**



## **SECTION 08620—UNIT SKYLIGHTS**

### **Ridge Mount Self Flashing Skylight System (RMSF)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate glazed skylight system work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Single or double glazed acrylic and/or polycarbonate unit skylight system complete with 3" installation flange on RMSF for installation on roof deck by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

#### 1.06 Manufacturer:

Non-thermally broken Ridge Mount Self Flashing skylight system shall be American Skylites model RMSF as manufactured by American Skylites, Arlington, Texas,(1-800-772-7401) sizes as shown on drawings.

#### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights and/or skylight systems, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

### **Part 2: Products:**

#### 2.01 Materials:

##### A. Self Flashing Frame:

Self flashing frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Self flashing frame shall have an integral condensation gutter and weep holes for sufficient drainage to the exterior. All corners shall be welded using the heliarc process.

##### B. Mullions and Tube Rafters:

Mullions and tube rafters shall be fabricated from 6063-T5/T6 aluminum extrusion. Mullions shall have a minimum thickness of .080. Mullions shall have an exterior compression mullion cap for air and water tight seal with a minimum thickness of .187. Tube rafters (as required only) shall have a minimum thickness of .110. All corners shall be welded using the heliarc process.

##### C. Acrylic and/or Polycarbonate glazing:

Acrylic and/or polycarbonate glazing shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Glazing shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom glazing colors and individual glazing thickness as selected by architect.

##### D. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

##### E. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

##### F. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

#### 2.02 Assembly:

All skylights shall be factory assembled\* and factory glazed. (\*partial field assembly required on larger units)

### **Part 3 Installation:**

#### **3.01 Site Inspection:**

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

#### **3.02 Installation:**

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

##### **A. Sealants:**

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

#### **3.03 Protection:**

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

#### **3.04 Cleaning:**

##### **A. General Cleaning:**

Installer shall remove all protective coverings from frames and/or glazing and shall leave installation free from heavy debris and/or sealant markings.

##### **B. Final Cleaning:**

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Grid Skylight System (GSCM)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate domed skylight system work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Single or double domed acrylic and/or polycarbonate unit skylight system complete with curb mount frame for installation on flashed curb by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

### 1.06 Manufacturer:

Non-thermally broken Grid System Curb Mount skylight system shall be American Skylites model GSCM (standard domes) or GSCM-PYR (pyramid domes) as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights and/or skylight systems, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### 2.01 Materials:

#### A. Curb Mount Frame:

Curb mount frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Curb mount frame shall have an integral condensation gutter and weep holes for sufficient drainage to the exterior. All corners shall be welded using the heliarc process.

#### B. Mullions:

Mullions shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Mullions shall have an exterior compression mullion cap for air and water tight seal with a minimum thickness of .060. All corners shall be welded using the heliarc process.

#### C. Acrylic and/or Polycarbonate Domes:

Acrylic and/or polycarbonate domes shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom dome colors and individual dome thickness as selected by architect.

#### D. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### E. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

#### F. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### 2.02 Assembly:

All skylights shall be factory assembled\* and factory glazed. (\*partial field assembly required on larger units)

## **Part 3 Installation:**

### **3.01 Site Inspection:**

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### **3.02 Installation:**

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect. **GSCM and GSCM-PYR units must be installed with structural mullion at a minimum 1/12 pitch.**

#### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### **3.03 Protection:**

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### **3.04 Cleaning:**

#### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

#### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Tandem Skylight System (TSCM)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the acrylic/polycarbonate domed skylight system work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Single or double domed acrylic and/or polycarbonate unit skylight system complete with curb mount frame for installation on flashed curb by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Acrylic and/or polycarbonate unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Acrylic and/or polycarbonate unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

### 1.06 Manufacturer:

Non-thermally broken Tandem System Curb Mount skylight system shall be American Skylites model TSCM (standard domes) or TSCM-PYR (pyramid domes) as manufactured by American Skylites, Fort Worth, Texas, (1-800-772-7401) sizes as shown on drawings.

### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights and/or skylight systems, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### 2.01 Materials:

#### A. Curb Mount Frame:

Curb mount frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Curb mount frame shall have an integral condensation gutter and weep holes for sufficient drainage to the exterior. All corners shall be welded using the heliarc process.

#### B. Mullions:

Mullions shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Mullions shall have an exterior compression mullion cap for air and water tight seal with a minimum thickness of .060. All corners shall be welded using the heliarc process.

#### C. Acrylic and/or Polycarbonate Domes:

Acrylic and/or polycarbonate domes shall be clear, #2447 White, #2412 Bronze, Clear/Clear, Clear/#2447 White, or #2412 Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .060. Custom dome colors and individual dome thickness as selected by architect.

#### D. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### E. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket.

#### F. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### 2.02 Assembly:

All skylights shall be factory assembled\* and factory glazed. (\*partial field assembly required on larger units)



## **Part 3 Installation:**

### **3.01 Site Inspection:**

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### **3.02 Installation:**

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect. **TSCM and TSCM-PYR units must be installed with mullion at a minimum 1/12 pitch.**

#### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

### **3.03 Protection:**

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

### **3.04 Cleaning:**

#### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

#### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Glass Thermal Break Curb Mount Fixed (GTCM) & Venting (GTVCM)**

#### **PART 1: General**

##### **1.01 Section Includes:**

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the thermal break, curb mount, fixed/venting, insulated glass (optional acrylic and/or polycarbonate double domes) skylight work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Insulated glass (optional acrylic and/or polycarbonate double domes) unit skylights complete with dual polyurethane thermally broken curb mount frame for installation on flashed curb by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### **1.02 References:**

American Society for Testing and Materials (ASTM)

##### **1.03 Performance Criteria:**

###### A. Uniform Load:

Insulated glass unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Insulated glass unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Insulated glass unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### **1.04 Submittals:**

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### **1.05 Warranty:**

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship (including insulated glass) for a period of five (5) years from date of installation.

#### 1.06 Manufacturer:

Thermally broken, curb mount, fixed/venting skylight(s) shall be American Skylites model GTCM/GTVCM as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

#### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

### **Part 2: Products:**

#### 2.01 Materials:

##### A. Curb Mount Frame:

Curb mount frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Curb mount frame shall have a polyurethane thermal break to reduce thermal transfer and reduce condensation on the interior of the frame. Curb mount frame shall have an integral condensation gutter. All corners shall be welded using the heliarc process.

##### B. Insulated Glass:

Insulated glass shall be minimum overall thickness of 3/4" (3/16" glass—1/2" air space—3/16" glass). Glazing options (Clear, Low "E", Low "E"/Argon gas, Bronze, Gray, Tempered, Laminated, or custom as selected by architect) shall be secured to frame with a fully welded retainer cap, minimum thickness of .060.

##### C. Venting Operator:

Venting units shall have factory installed, single point gear mechanism (max. 12" opening) with operator handle. (optional telescopic pole)

##### D. Insect Screen:

Venting units shall have aluminum frame screen with (gray or black) fiberglass screen material.

##### E. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

##### F. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket. All insulated glass shall be factory dual sealed. Venting sash shall close onto continuous santoprene compression gasket.

##### G. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

#### 2.02 Assembly:

All skylights shall be factory assembled and factory glazed.

### **Part 3 Installation:**

#### 3.01 Site Inspection:

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

#### 3.02 Installation:

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect. Minimum 3/12 pitch.

##### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

#### 3.03 Protection:

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

#### 3.04 Cleaning:

##### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or insulated glass and shall leave installation free from heavy debris and/or sealant markings.

##### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## **SECTION 08620—UNIT SKYLIGHTS**

### **Glass Thermal Break Self Flashing Fixed (GTSF) & Venting (GTVSF)**

#### **PART 1: General**

##### 1.01 Section Includes:

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the thermal break, insulated, self flashing, fixed/venting, insulated glass (optional acrylic and/or polycarbonate double domes) skylight work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Insulated glass (optional acrylic and/or polycarbonate double domes) unit skylights complete with 2 polyurethane thermal breaks and 1" fiberglass insulated 4" self flashing frame for installation on roof deck by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### 1.02 References:

American Society for Testing and Materials (ASTM)

##### 1.03 Performance Criteria:

###### A. Uniform Load:

Insulated glass unit skylights must meet the requirements of uniform load test ASTM E330 that requires glazing to withstand a positive and negative test pressure of 60PSF.

###### B. Air Infiltration:

Insulated glass unit skylights must meet the requirements of ASTM E283 that allows a maximum air infiltration of 0.06 CFM of the total glazed surface area.

###### C. Water Infiltration:

Insulated glass unit skylights must meet the requirements of ASTM E547/E331 that allows for no water infiltration at a test pressure of 12PSF.

##### 1.04 Submittals:

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### 1.05 Warranty:

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship (including insulated glass) for a period of five (5) years from date of installation.

#### 1.06 Manufacturer:

Thermally broken, insulated, self flashing, fixed/venting skylight(s) shall be American Skylites model GTSF/GTVSF as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401) sizes as shown on drawings.

#### 1.07 Alternates:

Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

### **Part 2: Products:**

#### 2.01 Materials:

##### A. Curb and Curb Frame:

Curb and curb frame shall be fabricated from 6063-T5/T6 aluminum extrusion. 4" curb and curb frame shall be minimum .070 with 2 polyurethane thermal breaks to reduce thermal transfer and reduce condensation on the interior of the frame and 1" fiberglass insulation. Curb frame shall have an integral condensation gutter. All corners shall be welded using the heliarc process.

##### B. Insulated Glass:

Insulated glass shall be minimum overall thickness of 3/4" (3/16" glass—1/2" air space—3/16" glass). Glazing options (Clear, Low "E", Low "E"/Argon gas Bronze, Gray, Tempered, Laminated, or custom as selected by architect) shall be secured to frame with a fully welded retainer cap, minimum thickness of .060.

##### C. Venting Operator:

Venting units shall have factory installed, single point gear mechanism (max. 12" opening) with operator handle. (optional telescopic pole)

##### D. Insect Screen:

Venting units shall have aluminum frame screen with (gray or black) fiberglass screen material.

##### E. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

##### F. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous extruded black Santoprene gasket. All insulated glass shall be factory dual sealed. Venting sash shall close onto continuous santoprene compression gasket.

##### G. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

#### 2.02 Assembly:

All skylights shall be factory assembled and factory glazed.

### **Part 3 Installation:**

#### 3.01 Site Inspection:

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

#### 3.02 Installation:

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect. Minimum 3/12 pitch.

##### A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

#### 3.03 Protection:

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

#### 3.04 Cleaning:

##### A. General Cleaning:

Installer shall remove all protective coverings from frames and/or insulated glass and shall leave installation free from heavy debris and/or sealant markings.

##### B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**

## SECTION 08620—UNIT SKYLIGHTS

### American Skylites, Inc.—Fall Protection Skylight

#### PART 1: General

##### 1.01 Section Includes:

###### A. Scope:

This section includes everything necessary for and incidental to the execution and completion of the double polycarbonate glazed thermal break curb mount/thermal break self flashing domed skylight work as shown on the drawings and specified herein.

###### B. Work Included:

Work included, and is limited to, the skylight materials only and includes the following:

1. Double domed polycarbonate unit skylight complete with polyurethane thermal break curb mount frame for installation on 9”/12” single wall or insulated wall curb supplied by American Skylites or on curbs by others.

###### C. Related Work:

1. Section \_\_\_\_\_ roofing.
2. Section \_\_\_\_\_ flashing and sheet metal.
3. Section \_\_\_\_\_ final cleaning.

##### 1.02 References:

- A. Construction Consulting Laboratory **Report #CCLI-00-109**
- B. OSHA Fall Protection regulations; 29 CFR 1910 & 1926

##### 1.03 Performance Criteria:

###### A. Uniform Load:

No breakage or disengagement of the glazing shall occur upon impact of 775 ft. lbs.

##### 1.04 Submittals:

###### A. Shop Drawings:

Submit \_\_\_\_\_ copies of manufacturers standard approval sheet for architects review and approval.

##### 1.05 Warranty:

Skylight manufacturer shall provide a written warranty against defects in materials and workmanship for a period of five (5) years from date of installation.

##### 1.06 Manufacturer:

Fall Protection skylight(s) shall be American Skylites model TCM-FG as manufactured by American Skylites, Arlington, Texas, (1-800-772-7401)

##### 1.07 Alternates:



Alternate manufacturers may not be considered without prior approval. Alternate manufacturers must have a minimum ten (10) years experience in the design and manufacture of skylights, must have similar complexity of projects completed within the past five (5) years and must submit drawings for architects review.

## **Part 2: Products:**

### **2.01 Materials:**

#### A. Thermal Break Curb Mount Frame:

Frame shall be fabricated from 6063-T5/T6 aluminum extrusion with a minimum thickness of .060. Frame shall have a polyurethane thermal break to reduce thermal transfer and reduce condensation on the interior of the frame. Frame shall have an integral condensation gutter. All corners shall be welded using the heliarc process. Optional 9”/12” curb wall shall be minimum 0.032 outer curb wall/.032 inner curb wall with optional 1” fiberglass or polyisocyanurate insulation.

#### B. Polycarbonate Domes:

Polycarbonate domes shall be Clear/Clear, Clear/White, or Bronze/Clear. Domes shall be secured to frame with a fully welded retainer cap, minimum thickness of .125”. Custom dome colors and as selected by architect.

#### C. Aluminum Finish:

All exposed aluminum to be Mill Finish, Bronze, White, Clear Anodized, Bronze Anodized, or Custom Color, as selected by architect.

#### D. Glazing Gaskets and Sealants:

All glazing to be separated from frame by a continuous sealant tape. All sealant to be Dow Corning 795.

#### E. Fasteners:

All screws and fasteners used in the factory assembly process shall be Stainless Steel. All fasteners and screws used for securing skylight to structure shall be by others.

### **2.02 Assembly:**

All skylights shall be factory assembled and factory glazed.

## **Part 3 Installation:**

### **3.01 Site Inspection:**

Installer shall notify general contractor/project manager of any structural or dimensional deficiencies immediately. No work shall proceed without the correction of all deficiencies or written authorization is given to proceed.

### **3.02 Installation:**

Skylight shall be installed in strict accordance with manufacturers installation drawings and instructions. Any deviation shall only be through written authorization from the architect.

A. Sealants:

No sealants shall be applied to aluminum if temperature is below 32 degrees F.

3.03 Protection:

Protection of skylights during construction shall be the responsibility of the general contractor/project manager.

3.04 Cleaning:

A. General Cleaning:

Installer shall remove all protective coverings from frames and/or domes and shall leave installation free from heavy debris and/or sealant markings.

B. Final Cleaning:

Final cleaning in accordance with manufacturers recommendations shall be by the general contractor/project manager.

**End of Section**