SECTION 07660
PREFORMED FLASHING PANELS

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PART 1 GENERAL

1.1 SECTION INCLUDES

A. Preformed flashing panels to weatherproof penetrations in exterior walls for the following systems:
1. Electrical.
2. Plumbing.
3. HVAC.

1.2 RELATED SECTIONS

A. Section 06100 - Rough Carpentry

B. Section 07100 - Dampproofing and Waterproofing.

C. Section 07250 - Weather Barriers.

D. Section 07620 - Sheet Metal Flashings.

E. Section 07900 - Joint Sealants.

F. Division 15 - Plumbing.

G. Division 15 - Mechanical.

H. Division 16 - Electrical.

1.3 REFERENCES

A. ASTM International (ASTM):
1. ASTM D 412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension.
2. ASTM D 638 - Standard Test Method for Tensile Properties of Plastics.
3. ASTM D 792 - Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
4. ASTM D 1505 - Standard Test Method for Density of Plastics by the Density-Gradient Technique.
5. ASTM D 2240 - Standard Test Method for Rubber PropertyDurometer Hardness.

1.4 SUBMITTALS

A.   Submit under provisions of Section 01300.

B.   Product Data: Manufacturer's data sheets on each product to be used, including:
1.   Preparation instructions and recommendations.
2.   Storage and handling requirements and recommendations.
3.   Installation methods.

C.   Warranty: Submit manufacturer's standard warranty.

1.5   QUALITY ASSURANCE

A.   Manufacturer Qualifications: Company specializing in manufacture of flashing systems with not less than 10 years documented experience.

B.   Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
1.   Finish areas designated by Architect.
2.   Do not proceed with remaining work until workmanship is approved by Architect.
3.   Rebuild mock-up area as required to produce acceptable work.

1.6   DELIVERY, STORAGE, AND HANDLING

A.   Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B.   Store materials in clean, dry area indoors in accordance with manufacturer's instructions.

C.   Protect materials during handling and installation to prevent damage.

1.7   SEQUENCING

A.   Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

B.   Coordinate flashing work with adjacent and adjoining work to ensure best possible weather resistance and durability of completed flashing.

1.8   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 recommended limits.

1.9   WARRANTY

A.   Provide manufacturers standard 10 year limited warranty.

PART 2 PRODUCTS

2.1   MANUFACTURERS

A.   Acceptable Manufacturer: Quickflash Weatherproofing Products, Inc., which is located at: 4129 Wagon Trail Ave.; Las Vegas, NV 89118; Toll Free Tel: 800-963-6886; Tel: 702-614-6100; Fax: 702-614-4090; Email:request info (contact@quickflashproducts.com); Web:www.quickflashproducts.com

B.   Substitutions: Not permitted.

C.   Requests for substitutions will be considered in accordance with provisions of Section

01600.

2.2 ELECTRICAL FLASHING PANELS

A. Panel Properties:
1. Non-corrosive and non-conductive.
2. Self-sealing around fasteners.
3. Eliminates the need for sealants.
4. Easy to integrate with building envelope and works with all cladding systems.

B. Material: Thermoplastic elastomer:
1. Hardness, ASTM D 2240, Shore A, 10 Seconds: 93.
2. Specific Gravity, ASTM D 792: 1.05 g/cu.cm.
3. Tensile Strength, ASTM D 412: 1,300 psi.

C. Model: E-AIB, electrical Arlington InBox flashing panel:
1. Fits: Arlington InBox.
2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

D. Model: E-LV, electrical low voltage flashing panel:
1. Fits: Low voltage rounded wire and coaxial cable.
2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

E. Model: E-DGB-C 1-3/8 inches, electrical dual gang box flashing panel:
1. Use: 1-coat stucco and EIFS systems.
2. Fits: Carlon adjustable dual gang box Part #B234ADJ.
3. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

F. Model: E-SGB-A 1-3/8 inches, electrical single-gang box flashing panel:
1. Use: 1-coat stucco and EIFS systems.
2. Fits: Allied moulded electrical single-gang boxes Part #9327-N.
3. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

G. Model: E-SGB-C 1-3/8 inches, electrical single-gang box flashing panel:
1. Use: 1-coat stucco and EIFS systems.
2. Fits: Carlon adjustable electrical single gang box Part #B121ADJ.
3. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

H. Model: E-3/0 B-A 1-3/8 inches, electrical 3/0 box flashing panel:
1. Use: 1-coat stucco and EIFS systems.
2. Fits: Allied moulded 3 inch round electrical boxes Part #9335-HNK and #9335-HNGK.
3. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

I. Model: E-DGB-C 7/8 inches, electrical dual gang box flashing panel:
1. Use: 3-coat stucco and lap siding with rain screen or furring strip applications.
2. Fits: Carlon adjustable dual gang box Part #B234ADJ.
3. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

J. Model: E-SGB-A 7/8 inches, electrical single-gang box flashing panel:
1. Use: 3-coat stucco and lap siding with rain screen or furring strip applications.
2. Fits: Allied moulded electrical single-gang boxes Part #9327-N.
3. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

K. Model: E-SGB-C 7/8 inches, electrical single-gang box flashing panel:
1. Use: 3-coat stucco and lap siding with rain screen or furring strip applications.
2. Fits: Carlon adjustable electrical single gang box Part #B121ADJ.
3. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

L.	Model: E-3/0 B-A 7/8 inches, electrical 3/0 box flashing panel:
1.	Use: 3-coat stucco and lap siding with rain screen or furring strip applications.
2.	Fits: Allied moulded 3 inch round electrical boxes Part #9335-HNK and #9335-HNGK.
3.	Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

M.	Model: E-SGB, electrical single-gang box flashing panel:
1.	Use: 5/8 inch depth 3-coat stucco and lap siding.
2.	Fits: The following single gang plastic boxes:
a.	Carlon: Model numbers B118A, B120A-UPC, and B122A-UPC.
b.	Thomas & Betts: Model numbers 118-N, 118-NP, 120-N, 120-NP, 122-N, RN-23, 1240, and 2000.
c.	Steel City: Model numbers 121-N, and 1220N.
d.	Cantex, with nails: Model numbers EZ18SN,EZ20SN, and EZ23SN.
e.	Crouse-Hinds: Model number TP1800.
f.	P & S: Model numbers P1-18-R, S1-18-R, P1-22-R, and S1-22-R.
g.	Raco: Model number 7302.
3.	Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

N.	Model: E-SGB-C 5/8 inches, electrical single-gang box flashing panel:
1.	Use: 5/8 inch depth 3-coat stucco and lap siding.
2.	Fits: Carlon adjustable electrical single gang box Part #B121ADJ.
3.	Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

O.	Model: E-3/0 B, electrical 3/0 box flashing panel:
1.	Use: 5/8 inch depth 3-coat stucco and lap siding.
2.	Fits: The following 3/0 plastic boxes:
a.	Carlon: Model numbers B518A and B518P.
b.	Thomas & Betts: Model numbers 3R-16-N, 3R-16-NGP, 3R-16-BH, 3R-16-BHGP, N-321-GC, and 3060.
c.	Steel City: Model number N-321-GC.
3.	Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

P.	Model: E-4/0 B, electrical 4/0 box flashing panel:
1.	Use: 5/8 inch depth 3-coat stucco and lap siding.
2.	Fits: The following 3/0 plastic boxes:
a.	Carlon: Model numbers B520A, B520P, B620L, B620H, B620HG, B620K, B620KG, B620DC, and B720-SHK.
b.	Thomas & Betts: Model numbers 4R-20-N, 4R-20-NGP, 4R-20-BH, and 4R-20-BHGP.
c.	Allied Moulded: Model number 9250.
d.	Cantex: Model numbers EZ20CN, EZ20CNG, EZ20CH, and EZ20CHG.
3.	Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

Q.	Model: E-PC 3/0, electrical pancake 3/0 box flashing panel:
1.	Use: 3-coat stucco and lap siding.
2.	Fits: The following 3/0 plastic boxes:
a.	Thomas & Betts: Model numbers 210-L and 210-LC.
b.	Steel City: Model numbers 36125-D, 36115-C, and 210.
c.	EGS Appleton: Model number 510LC.
d.	Raco: Model numbers 292 and 287.
3.	Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

R.	Model: E-PC 4/0, electrical pancake 4/0 box flashing panel:
1.	Use: 3-coat stucco and lap siding.
2.	Fits: The following 3/0 plastic boxes:
a.	Thomas & Betts: Model numbers 410, 410-L, and 410-LC.
b.	Steel City: Model number 410.

        c.   Orbit Electric: Model number 4PB.

        d.   Raco: Model number 293.

    3.   Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

S.   Model: E-4/0 SB, electrical 4/0 box flashing panel:
1. Use: 1-coat stucco and EIFS systems.
2. Fits: The following 3/0 plastic boxes:
   a. Thomas & Betts: Model number 54151 1/2.
   b. Steel City: Model number 54151 1/2.
   c. EGS Appleton: Model number 40-1/2.
   d. Orbit Electric: Model numbers 4RB-50, 4RB-MKO, and 4RB-NM.
   e. Raco: Model number 125.
3. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

T.   Model: E-SGR, electrical single gang 1/2 inch raised plaster ring cover flashing panel:
1. Use: 3-coat stucco and lap siding. For plastic "P" or "Mud" rings.
2. Fits: The following 3/0 plastic boxes:
   a. Carlon: Model numbers A-410, A-411, A-412, A-413, and A-414.
   b. Cantex: Model number EZ03SXA.
3. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

U.   Model: P-50, plumbing, gas, and HVAC flashing panel:
1. Fits: 1/2 to 3/4 inch sized pipes - copper, rigid, and PVC.
2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

2.3 PLUMBING FLASHING PANELS

A.   Panel Properties:
1. Non-corrosive and non-conductive.
2. Self-sealing around fasteners.
3. Eliminates the need for sealants.
4. Easy to integrate with building envelope and works with all cladding systems.

B.   Panel Material: Combination of high-density polyethylene (HDPE) and low-density polyethylene (LDPE):
1. HDPE, Specific Gravity, ASTM D 1505: 0.953 g/cu.cm.
2. HDPE, Tensile Strength at Yield, ASTM D 638: 3,100 psi.
3. LDPE, Specific Gravity, ASTM D 792: 0.917 g/ cu.cm.
4. LDPE, Tensile Strength at Yield, ASTM D 638: 1,300 psi.

C.   Weatherproof Seal: Thermoplastic elastomer:
1. Hardness, ASTM D 2240, Shore A, 10 Seconds: 46.
2. Specific Gravity, ASTM D 792: 1.05 g/cu.cm.
3. Tensile Strength, ASTM D 412: 490 psi.

D.   Model: P-25, plumbing flashing panel:
1. Fits: 1/8 to 3/8 inch sized pipes - copper, rigid, and PVC.
2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

E.   Model: P-50, plumbing, gas, and HVAC flashing panel:
1. Fits: 1/2 to 3/4 inch sized pipes - copper, rigid, and PVC.
2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

F.   Model: P-50 GW, plumbing, gas, and HVAC flashing pane with ground wire:
1. Fits: 1/2 to 3/4 inch sized pipes - copper, rigid, and PVC with separate ground wire.
2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

G. Model: P-100, plumbing, gas, and HVAC flashing panel:
   1. Fits: 1 to 1-1/4 inch sized pipes - copper, rigid, and PVC.
   2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

H. Model: P-100 GW, plumbing, gas, and HVAC flashing pane with ground wire:
   1. Fits: 1 to 1-1/4 inch sized pipes - copper, rigid, and PVC with separate ground wire.
   2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

I. Model: P-150, plumbing, gas, and HVAC flashing panel:
   1. Fits: 1-1/2 to 1-3/4 inch sized pipes - copper, rigid, PVC, and ABS.
   2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

J. Model: P-150 GW, plumbing, gas, and HVAC flashing pane with ground wire:
   1. Fits: 1-1/2 to 1-3/4 inch sized pipes - copper, rigid, PVC, and ABS with separate ground wire.
   2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

K. Model: P-200, plumbing, gas, and HVAC flashing panel:
   1. Fits:
      a. 2 to 2-1/2 inch sized pipes - copper, rigid, PVC, and ABS.
      b. 3 inch single wall sheet metal duct for HVAC applications.
   2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

L. Model: P-200 GW, plumbing, gas, and HVAC flashing pane with ground wire:
   1. Fits:
      a. 2 to 2-1/2 inch sized pipes - copper, rigid, PVC, and ABS with separate ground wire.
   2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

M. Model: P-300, plumbing, gas, and HVAC flashing panel:
   1. Fits:
      a. 3 inch sized pipes - copper, rigid, PVC, and ABS.
      b. 4 inch single wall sheet metal duct.
   2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

N. Model: P-400, plumbing, gas, and HVAC flashing panel:
   1. Fits:
      a. 4 inch sized pipes - copper, rigid, PVC, and ABS.
      b. 5 inch single wall sheet metal duct.
   2. Size: 12-1/2 inches by 12-1/2 inches by 3/32 inch (318 x 318 x 2.4 mm).

O. Model: P-600, plumbing, gas, and HVAC flashing panel:
   1. Fits:
      a. 6 inch sized pipes - copper, rigid, PVC, and ABS.
      b. 6 inch single wall sheet metal duct.
   2. Size: 12-1/2 inches by 12-1/2 inches by 3/32 inch (318 x 318 x 2.4 mm).

P. Model: P-800, plumbing, gas, and HVAC flashing panel:
   1. Fits:
      a. 8 inch sized pipes - copper, rigid, PVC, and ABS.
      b. 7, 8 or 9 inch single wall sheet metal duct.
   2. Size: 18-1/2 inches by 18-1/2 inches by 3/32 inch (470 x 470 x 2.4 mm).

Q. Model: P-1000, plumbing, gas, and HVAC flashing panel:
   1. Fits:
      a. 10 inch sized pipes - copper, rigid, PVC, and ABS.
      b. 10 or 11 inch single wall sheet metal duct.

2. Size: 18-1/2 inches by 18-1/2 inches by 3/32 inch (470 x 470 x 2.4 mm).

R. Model: P-1200, plumbing, gas, and HVAC flashing panel:
1. Fits:
   a. 12 inch sized pipes - copper, rigid, PVC, and ABS.
   b. 12 inch single wall sheet metal duct.
2. Size: 18-1/2 inches by 18-1/2 inches by 3/32 inch (470 x 470 x 2.4 mm).

S. Model: P-2PS, plumbing, gas, and HVAC flashing panel:
1. Two piece system for use on copper pipes with exterior T's sweated on.
2. Cut out center to fit 1/2 inch to 2 inch copper pipes.
3. Sealant is required to make seal at pipe to panel.
4. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

2.4 HVAC FLASHING PANELS

A. Panel Properties:
1. Non-corrosive and non-conductive.
2. Self-sealing around fasteners.
3. Eliminates the need for sealants.
4. Easy to integrate with building envelope and works with all cladding systems.

B. Panel Material: Combination of high-density polyethylene (HDPE) and low-density polyethylene (LDPE):
1. HDPE, Specific Gravity, ASTM D 1505: 0.953 g/cu.cm.
2. HDPE, Tensile Strength at Yield, ASTM D 638: 3,100 psi.
3. LDPE, Specific Gravity, ASTM D 792: 0.917 g/ cu.cm.
4. LDPE, Tensile Strength at Yield, ASTM D 638: 1,300 psi.

C. Weatherproof Seal: Thermoplastic elastomer:
1. Hardness, ASTM D 2240, Shore A, 10 Seconds: 46.
2. Specific Gravity, ASTM D 792: 1.05 g/cu.cm.
3. Tensile Strength, ASTM D 412: 490 psi.

D. Model: A/C U-C, Universal Curved, A/C line set flashing panel:
1. Fits: Line sets with 1-1/2 inch to 2-3/4 inch insulation tubing.
2. Size: 16 inches by 18 inches by 4-7/8 inch (406 x 457 x 124 mm).

E. Model: A/C U-S, Universal Squared, A/C line set flashing panel:
1. Fits: Line sets with 1-1/2 inch to 3-1/2 inch insulation tubing.
2. Size: 13.25 inches by 15.42 inches by 9.56 inch (337 x 392 x 243 mm).

F. Model: A/C U-B, Universal Brick and Cultured Stone, A/C line set flashing panel:
1. Fits: Line sets with 1-1/2 inch to 3-1/2 inch insulation tubing.
2. Size: 13.25 inches by 15.42 inches by 13.27 inch (337 x 392 x 337 mm).

G. Model: P-200, plumbing, gas, and HVAC flashing panel:
1. Fits:
   a. 2 to 2-1/2 inch sized pipes - copper, rigid, PVC, and ABS.
   b. 3 inch single wall sheet metal duct for HVAC applications.
2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

H. Model: P-300, plumbing, gas, and HVAC flashing panel:
1. Fits:
   a. 3 inch sized pipes - copper, rigid, PVC, and ABS.
   b. 4 inch single wall sheet metal duct.
2. Size: 11-1/8 inches by 11-1/8 inches by 3/32 inch (283 x 283 x 2.4 mm).

I.   Model: P-400, plumbing, gas, and HVAC flashing panel:
    1. Fits:
        a.   4 inch sized pipes - copper, rigid, PVC, and ABS.
        b.   5 inch single wall sheet metal duct.
    2. Size: 12-1/2 inches by 12-1/2 inches by 3/32 inch (318 x 318 x 2.4 mm).

J.   Model: P-600, plumbing, gas, and HVAC flashing panel:
    1. Fits:
        a.   6 inch sized pipes - copper, rigid, PVC, and ABS.
        b.   6 inch single wall sheet metal duct.
    2. Size: 12-1/2 inches by 12-1/2 inches by 3/32 inch (318 x 318 x 2.4 mm).

K.   Model: P-800, plumbing, gas, and HVAC flashing panel:
    1. Fits:
        a.   8 inch sized pipes - copper, rigid, PVC, and ABS.
        b.   7, 8 or 9 inch single wall sheet metal duct.
    2. Size: 18-1/2 inches by 18-1/2 inches by 3/32 inch (470 x 470 x 2.4 mm).

L.   Model: P-1000, plumbing, gas, and HVAC flashing panel:
    1. Fits:
        a.   10 inch sized pipes - copper, rigid, PVC, and ABS.
        b.   10 or 11 inch single wall sheet metal duct.
    2. Size: 18-1/2 inches by 18-1/2 inches by 3/32 inch (470 x 470 x 2.4 mm).

M.   Model: P-1200, plumbing, gas, and HVAC flashing panel:
    1. Fits:
        a.   12 inch sized pipes - copper, rigid, PVC, and ABS.
        b.   12 inch single wall sheet metal duct.
    2. Size: 18-1/2 inches by 18-1/2 inches by 3/32 inch (470 x 470 x 2.4 mm).

PART 3 EXECUTION

3.1   EXAMINATION

A.   Examine areas to receive flashing panels. Notify Architect of conditions that would adversely affect installation or subsequent use.

B.   Do not begin installation until substrates have been properly prepared and unacceptable conditions have been corrected.

3.2   PREPARATION

A.   Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

B.   Heat sweat copper pipes before installation of flashing panels.

3.3   INSTALLATION

A.   Install flashing panels in accordance with manufacturer's instructions.

B.   Electrical Flashing Panels:
    1. Select flashing panel required for specific electrical boxes.
    2. Push flashing panel over electrical box with label facing to exterior to form weatherproof seal around box.
    3. Ensure flashing panel collar edge is flush with electrical box opening edge.
    4. Nail flashing panels to walls with corrosion-resistant nails at top of panels.(Optional)

C.   Plumbing Flashing Panels, 1 Piece:
1.   Select flashing panel required for specific pipe sizes.
2.   Push flashing panel over pipe with label facing to exterior to form weatherproof seal around pipe.
3.   Nail flashing panels to walls with corrosion-resistant nails at top of panels. (optional)

D.   Plumbing Flashing Panels, 2 Piece:
1.   Cut flashing panel scores to size of pipe.
2.   Place bottom panel under pipe.
3.   Snap top panel to bottom panel over pipe.
4.   Seal pipe to flashing panel with exterior polyurethane joint sealant for weatherproof seal.

E.   HVAC Flashing Panels:
1.   Select flashing panel required for specific line-set sizes.
2.   Push flashing panel over vent pipe or line set with label facing to exterior to form weatherproof seal around pipe.
3.   Nail flashing panels to walls with corrosion-resistant nails at top of panels.
4.   A/C panel must be primed and painted after install.
5.   Integrate with WRB

F.   Installation After Weather Resistive Barriers in Installed (Slit Method):
1.   Cut a slit in the WRB.
2.   Slide panel onto penetration then up underneath the WRB and press to ensure a flush seal.
3.   Tape sides and top.

3.4   PROTECTION

A.   Protect installed products until completion of project.

B.   Repair or replace damaged products before Substantial Completion.

END OF SECTION