BID DOCUMENTS

PROJECT MANUAL

CITY OF CLEARWATER

PARKS AND RECEREATION

SPECTRUM FIELD

EXTERIOR WALL COATING PROJECT

PREPARED FOR:

City of Clearwater

MAY 29TH, 2018

SECTION 07920

JOINT SEALANTS

PART 1 GENERAL

1.1 SUMMARY

A. Sealants and caulking for joints between dissimilar materials and to close other joints.

B. Work to include but not limited to all labor, materials, equipment, and tools required to install new vertical joint sealant on exterior gymnasium walls as indicated on the construction documents. .

C. Sealant of Vertical and Horizontal Joints

1. Any sealant that touches EIFS must be replaced
2. Any sealant that touches CMU/concrete leave in tact – not included
3. Any sealant that touches metal frames (windows/doors/etc.) must be replaced
4. All vertical expansion joints
5. Any other areas identified during pre-bid meeting and onsite project walk through

1.2 REFERENCES

A. ASTM C 834-Standard Specification for Latex Sealants.

B. ASTM C 919-Standard Practice for Use of Sealants in Acoustical Applications.

C. ASTM C 920-Standard Specification for Elastomeric Joint Sealants.

D. ASTM D 1056-Standard Specification for Flexible Cellular Materials-Sponge or Expanded Rubber.

E. SWRI (Sealant, Waterproofing and Restoration Institute): Sealants: The Professional's Guide.

1.3 SUBMITTALS

A. Product Data: Indicate chemical characteristics, performance criteria, limitations and color chart for all materials.
   1. Low Emitting Materials.

(a) Submit manufacturer's Material Safety Data Sheet Indicating VOC limits of all products.

B. Submit manufacturer's installation instructions.

1.4 QUALITY ASSURANCE

A. Single source responsibility: Obtain materials from a single manufacturer.

B. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum 30 years documented experience.

C. Applicator Qualifications: Approved applicator by roof system manufacturer is required.

1.5 WARRANTY

A. Replace sealants and caulking which fails because of loss of cohesion or adhesion, or does not cure.

PART 2 PRODUCTS

2.1 MATERIALS

A. PRODUCT OPTIONS AND SUBSTITUTIONS
1. Acceptable Manufacturers:
   (a) The Garland Company

B. Any deficiencies in performance, warranty terms or improper submittal procedure will constitute grounds for immediate rejection of substitution.

B. Sealant Type: Vertical Expansion Joints
1. Moisture curing one-part elastomeric adhesive sealant
2. Non-sag type for vertical applications.
3. Capable of being continuously immersed in water; withstand movement up to 50 percent of joint width and satisfactory applied throughout a temperature range of 40 degrees to 90 degrees Fahrenheit.
4. Uniform, homogenous, and free from lumps, skins, and coarse particle when mixed.
5. Tuff-Stuff MS
   (a) Shear Strength: 225 psi
   (b) Slump: 0 Slump
   (c) No measurable shrinkage after 14 days
6. Shore A hardness: 25-35
7. Conforming to requirements of ASTM C920, ASTM C 679, ASTM D 412
8. Non-Staining and non-bleeding.
9. Color: Grey

C. Back-up Materials:
   1. As recommended by caulking or sealant manufacturer and compatible with each material.
   2. Preformed material sized to require 25 percent to 50 percent compression upon insertion in joint.
   3. Do not use materials impregnated with oil, bitumen or similar materials.

D. Bond Breakers: Where joints are not of sufficient depth to receive back-up material install polyethylene bond-breaking tape at back of joint.

E. Primer:
   1. As recommended by manufacturers of caulking or sealant used.
   2. Type that will seal the surfaces and prevent absorption of the vehicle essential to the retention of elasticity by the caulking or sealant compound.

F. Accessories: Provide solvent, cleaning agents and other necessary materials as recommended by the caulking or sealant manufacturer essential for a complete installation.

PART 3 EXECUTION

3.1 PREPARATION

A. Verify joint dimensions, physical and environmental conditions are acceptable to receive work of this Section.

B. Verify that substrate surfaces and joint openings are ready to receive work.

C. Verify that joint backing and release tapes are compatible with sealant.

D. Remove loose materials and foreign matter, which might impair adhesion of sealant.

E. Clean and prime joint under provisions of manufacturer's instructions.

F. Perform preparation under provisions of manufacturer's instructions.

G. Protect elements surrounding work of this section from damage or disfiguration.

3.2 INSTALLATION

A. Perform work under provisions of ASTM C 804 for solvent release and ASTM C 790 for latex base sealants.

B. Install sealant under provisions of manufacturer's instruction.

C. Measure joint dimensions and size materials to achieve required width/depth ratios.

D. Install joint backing to achieve a neck dimension no greater than 1/3 of the joint width.

E. Install sealant free of air pockets, foreign embedded matter, ridged and sags.

F. Apply sealant within recommended temperature range. Consult manufacturer when sealant cannot be applied within these temperature ranges.

G. Apply generally with caulking gun of proper nozzle size to fit joints.

H. Apply with sufficient pressure to fill joint from backing to surface.

I. For joints in flat surfaces, neatly tool compound slightly concave with proper tools.

J. Execute finishing of caulking around frames with coving tool.

K. As work progresses, immediately remove compound that may accidentally flow onto adjoining surfaces using manufacturer's recommended solvent and cleaners. Remove excess material from joints immediately.

L. At completion, carefully check all joints for damage and repair-damaged joints.

M. Clean adjoining surfaces.

N. Protect sealants and caulking until cured.

END OF SECTION

SECTION 09800

ARCHITECTURAL WALL COATING

PART 1 – GENERAL

1.1 SUMMARY

A. This specification is for a one component, low solvent, emulsified poly-resin architectural wall coating. It damp proofs and beautifies all types of exterior and interior masonry surfaces such as concrete, brick, CMU, stucco and exterior insulating finishing systems (EIFS).

1.2 WORK INCLUDED

A. Provide all labor, materials (not listed on bid sheet), equipment and services necessary to complete coating application work:

1. Preparation of all surfaces indicated to receive new elastomeric coating. Cleaning and repairs.

2. Protection of surfaces not to be treated

3. Application of coating materials

1.3 RELATED SECTIONS

A. Repairs to expansion joints and application of joint sealants: Section: 07900

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's standard submittal package including specification, installation instructions, and general information for each waterproofing material.

B. Applicator Qualifications: Submit a current qualified applicator certificate from the specified waterproofing manufacturer.

1.5 QUALIFICATIONS

A. Primary coating materials shall be products from a single manufacturer. The primary manufacturer shall recommend any secondary materials. Manufacturer shall have a minimum of 10 years experience in the manufacturing of materials of this type.

B. Applicators shall have a minimum of 5 years experience in the application of damp proofing materials of the type specified. Applicator shall be an authorized applicator from the specified damp proofing manufacturer.

C. Pre-bid Job Walk: Ten (10) working days prior to bid opening there is to be a mandatory pre-bid job walk. Anyone not attending the pre bid job walk will not be allowed to bid the project. All products considered an equal to the specified product or any changes in the scope of work or installation or specifications must be presented at the pre bid job walk. If a change in the specification is accepted, it will be considered as an alternate and will be presented as a bid amendment issued five (5) working days prior to the bid opening. No other changes to the specification or bid documents will be accepted.

D. Pre-Installation Conference: Just prior to commencement of the elastomeric coating system, meet at the site with a representative of the coating manufacturer. The elastomeric coating contractor, the general contractor, the architect and other parties affected by this section. Review methods and procedures, substrate conditions, scheduling and safety.

1.6 DELIVERY, STORAGE AND HANDLING

A. Store all coating materials in the original unopened containers between 50° - 80°F (10° - 26°C) until ready for use.

B. Follow the special handling or storage requirements of the manufacturer for cold weather, hot weather, etc.

C. Safety: Refer to all applicable data, including but not limited to, MSDS sheets, PDS sheets, product labels, and specific instructions for specific personal protection requirements.

D. Ventilation: Provide adequate ventilation to prevent the accumulation of hazardous fumes during application.

E. Environmental requirements: Proceed with work of this section only when existing and forecasted weather conditions will permit the application to be performed in accordance with the manufacturer’s recommendations.

1.7 WARRANTY

A. The contractor shall guarantee that all work performed will be free from defects in materials and workmanship. The contractor is to provide a 2 year labor/workmanship warranty. Upon notice of defect in writing, the contractor within one year after completion of work shall, at his own expense, make all necessary repairs or replacements of the defective work in question.

B. A 5-year, material warranty is available with this system provided it has been installed by a Garland Approved Applicator and is installed according to this specification.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. The design is based upon coating systems engineered and manufactured by The Garland Company or approved equals:

The Garland Company
3800 East 91st Street
Cleveland, Ohio 44105
Telephone: (800) 762-8225
Website: www.garlandco.com

2.2 MATERIALS

A. Emulsified Acrylic Coating: Tuff-Coat for damp proofing and beautifying all types of exterior and interior masonry surfaces such as concrete, brick work, stucco and exterior insulation finish systems (EFIS).

Tuff-Coat has the following physical properties:

Tensile Strength: 160 psi (ASTM D-2370)

Elongation: 585% (ASTM D-2370)

Water Vapor Permeability @ 10 mils: 20 Perms (ASTM D-1653)

Solids by Volume: 47.4%

B. Hybrid Sealant: Tuff-Stuff MS single-component MS Polymer sealant for joints and cracks in masonry surfaces.

C. Cement-based patching compound: Gar-Rock is an all-weather, fast setting, chemical action concrete patching material designed to patch concrete surfaces where quick permanent repairs are desired. (Coating will not adhere to Gar-Rock Compound).

D. Epoxy-based patching compound: Fill-Loc Crack Repair is a two-component, VOC compliant, 100% solids epoxy patching product designed to make repairs to small surface imperfections prior to applying a thin coating.

E. Polyester Tape: Dura-Walk Polyester Tape is a fusion bonded fabric polyester designed to be reinforcement fabric over cracks or joints.

F. Nontoxic Biodegradable Cleaner: B-Clean is a heavy-duty chemical formulation designed to clean a variety of masonry substrates including: concrete, brick, stone, aggregate, and block surfaces.

G. Misc. Accessories: All items incorporated into this system shall be compatible with and approved by coating manufacturer.

NOTE: Allow additional material for rough or irregular surfaces and up to 10% for material loss during application and differences in substrate porosity.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Verify that substrate is ready to receive work; surface is clean, dry and free from projections and depressions, loose scale, sand, curing compounds, grease, oil, asphalt, loose coatings need removed and other foreign deposits.

B. Do not begin work until concrete substrate has cured 28 days, minimum. Water cured treatment of concrete is preferred. Resin or water based curing compound should not be used. Non-compatible curing agents must be removed prior to application.

C. The work shall not be started when temperature is under 50°F (10°C) or when precipitation is imminent.

D. Verify that all other work involved with this area, done under other sections, has been completed and accepted by the architect and general contractor prior to starting the waterproofing application.

E. Concrete surface pH level must not be higher than 11 prior to coating.

F. Damaged areas of concrete, mortar joints or EFIS should be repaired prior to coating.

3.2 CLEANING METHODS

A. Recommendations for Cleaning of EFIS: Before making repairs and coating the existing EFIS walls, the walls will be thoroughly cleaned. It is strongly recommended that you contact the manufacturer of any cladding material for proper cleaning instructions. EIFS finishes are most effectively and safely cleaned with the use of general cleaning compounds, followed by a mildly pressurized water rinse. Acidic cleaners are not recommended for routine cleaning of Dryvit finishes. The only condition that MAY warrant use of acidic cleaners is efflorescence, which is discussed later.

1. Preparation - Protect people, vehicles, property and all surfaces not intended for cleaning from splash, residue, fumes, rinse and wind drift. Read the cleaning solution manufacturer's instructions for the proper dilution appropriate for the surface cleanliness/condition of the textured finish. Mix cleaning solution in accordance with those manufacturer's instructions. Test the prepared mixture on all surfaces that may come into contact with it during application and rinsing. Contact the manufacturer of the cleaning solution for more information and cautions for use. Check all equipment for compatibility with the type of cleanser used.

2. Pressurized Water Cleaning Equipment – General Information: Leaning a ladder against any wall coated with Dryvit finishes can cause damage. It is normally most economical and efficient to use pressurized water for the cleaning/rinsing operation. The simplest method of delivering pressurized water is to use a garden hose. This is sufficient on most applications to both prewet the wall surface and rinse away applied cleaning solutions. Some commercially available pressurized water delivery systems feature a pressure gun and nozzle equipped with a control switch.

This setup permits the operator to apply cleaning solutions to a wall over 30.5 m (100 ft.) from the base unit. Other systems have two separate hoses -one with plain water and the other with a cleaning solution.

The tip angle of the nozzle should be appropriate for the distance between the area being cleaned and the nozzle tip. A 10° angle tip may be appropriate when the surface being cleaned is 30.5 m (100 ft) above the nozzle, but not when the surface being cleaned is .61–1.5 m (2-5 ft) away from the tip of the nozzle. For close proximity cleaning, tip angles of 45° or greater must be used to prevent damage to the finish.

Water used for rinsing must be cold. Hot or even warm water will cause softening of the finish, and may result in damage to or removal of finish. The pressurized water rinse must not be harsh enough to erode the finish. Such degradation will reduce the long-term performance of the finish. Seek the equipment manufacturer's advice and use care when using this type of pressure near sealant joints and wood trim as well.

Misdirected, high-pressure spray can damage most materials and surfaces! Caution should be taken regarding high pressure rinsing with specialty applications.

Cleaning solutions used with this method should be compatible with the equipment. Some equipment manufacturers are careful to recommend that only specific cleaning compounds be pumped through their equipment. Many proprietary cleaning solutions may be subject to periodic change in formulation. It is suggested, therefore, that each product being considered be sample tested on a panel or inconspicuous wall area and judged on a trial basis before being used more extensively.

3. Cleaning Solution Application:

   A. Application of cleaning solutions can be accomplished using a low-pressure sprayer, 30 to 50 psi (200 to 350 kPa), or through a pressurized water-cleaning unit. The pressure used must be adequate to coat the finish surface with the cleaning solution and not more. Chemicals in the cleaner provide the cleaning action, not the force of the water spray used to apply the cleaner. Light scrubbing with a soft bristle brush may be necessary.

      Follow the cleaning solution manufacturer's instructions for application and scrubbing. Some solution manufacturers recommend application from the bottom, upward, to avoid "clean streaking". Application in vertical sections is also typically recommended, because this allows re-rinsing clean sections below the vertical section being cleaned.

      Follow the solution manufacturer's recommendations for dwell time on the wall surface prior to rinsing. (Dwell time is the period of time the cleaning solution is left on the wall prior to rinsing off.) Heat, direct sunlight and wind will affect the drying time and reaction rate of cleaning solutions. Ideally, the cleaning crew should be working on shaded areas to avoid rapid evaporation. Caution: Never use high pressure to apply cleaning solutions, as the solution may be driven through the finish and into the base coat, and become the source of future staining.

4. Pressurized Water Rinsing:

   A. Rinse the wall with large amounts of clean, pressurized water from top to bottom before the cleaning solution can dry. All wall areas below the cleaned area must also be rinsed down thoroughly in a vertical section. Failure to completely flush the cleaned area and all wall areas below of the cleaning solution may leave residues that may emerge upon exposure to precipitation. Rinse all equipment thoroughly after each use. Higher pressures should be used for this pressurized water rinse, as long as it does not damage the finish. Pressure should normally be kept below 600 psi.

      The higher pressure is needed to remove surface contaminants that have been lifted by the chemical action of the cleaning solution, and also to remove any residue of the cleaning solution itself. This is why it is important not to use high-pressure unit the cleaning solution has been applied (by low pressure or mild scrubbing) and allowed to act for the appropriate dwell time. Use of pressurized clean water alone to clean a finish will require higher water pressures to remove the surface contaminants, which increases the likelihood of damaging the finish. Without application of a cleaning solution, the pressure required to clean the finish will usually require such force that the surface of the finish is abraded or removed. This must be avoided. Finish damaged by such "power washing" techniques alone can void product performance warranties.

5. Pressurized Water Cleaning Equipment – General Information: Leaning a ladder against any wall coated with Dryvit finishes can cause damage. It is normally most economical and efficient to use pressurized water for the cleaning/rinsing operation. The simplest method of delivering pressurized water is to use a garden hose. This is sufficient on most applications to both prewet the wall surface and rinse away applied cleaning solutions. Some commercially available pressurized water delivery systems feature a pressure gun and nozzle equipped with a control switch.

   This setup permits the operator to apply cleaning solutions to a wall over 30.5 m (100 ft) from the base unit. Other systems have two separate hoses -one with plain water and the other with a cleaning solution.

   The tip angle of the nozzle should be appropriate for the distance between the area being cleaned and the nozzle tip. A 10° angle tip may be appropriate when the surface being cleaned is 30.5 m (100 ft) above the nozzle, but not when the surface being cleaned is .61–1.5 m (2-5 ft) away from the tip of the nozzle. For close proximity cleaning, tip angles of 45° or greater must be used to prevent damage to the finish.

   Water used for rinsing must be cold. Hot or even warm water will cause softening of the finish, and may result in damage to or removal of finish. The pressurized water rinse must not be harsh enough to erode the finish. Such degradation will reduce the long-term performance of the finish. Seek the equipment manufacturer's advice and use care when using this type of pressure near sealant joints and wood trim as well.

Misdirected, high-pressure spray can damage most materials and surfaces! Caution should be taken regarding high pressure rinsing with specialty applications.

Cleaning solutions used with this method should be compatible with the equipment. Some equipment manufacturers are careful to recommend that only specific cleaning compounds be pumped through their equipment. Many proprietary cleaning solutions may be subject to periodic change in formulation. It is suggested, therefore, that each product being considered be sample tested on a panel or inconspicuous wall area and judged on a trial basis before being used more extensively.

3.3 EIFS REPAIRS – SMALL HOLES

A. Holes or other damages less than 76mm x 76mm (3”x3”) in size with a maximum depth of 1” can be repaired by using Dryvit Rapid Patch product or similar.

1. With a sharp utility knife, cut through and remove the lamina, exposing a neat uniform-sized area of insulation slightly larger than the damaged area. Using a disk grinder or belt sander with a 20 grit aluminum oxide disk or belt, remove the finish around the cut, exposing the reinforced base coat approximately 76 mm (3") around the damage area.

2. Cut out the loose, damaged foam to reveal fresh foam. Cutting off the foam all the way to substrate is not recommended. When foam in the damaged area is well bonded to the substrate, care must be taken to expose as little of the substrate as possible and prevent rupturing the surface of the substrate. The area to be patched should be round or rectangular in shape and between 19 mm and 25 mm (3/4"and 1") in depth. Deeper patches should be filled with a piece of EPS so the patch thickness is within this range. RapidPatch material may be used to adhere the EPS filler to the substrate.

3. Precisely mask the surrounding finish with masking tape.

4. Mix the RapidPatch and apply the mixture to the damaged area with a margin trowel to a depth of approximately 3.2 mm (1/8") below the existing base coat surface. Also add a thin layer of material on the exposed base coat surrounding the patch. Cut a piece of mesh to the proper size and place over the wet RapidPatch overlapping the existing base coat a minimum of 25 mm (1"). Add additional RapidPatch material to completely fill the damaged area, cover the mesh and feather onto the surrounding base coat. If the material appears initially loose, wait a short time until it stiffens up and level off any imperfections with additional RapidPatch mixture as needed.

5. When the patching material in the damaged area is stiff enough, use a clean, damp margin trowel to smooth out the surface. This may be repeated until a satisfactory surface is achieved. The trowel must be clean and damp prior to each smoothing.

6. Let RapidPatch set for at least 60 minutes, depending on ambient conditions.

7. If necessary, again, precisely mask the surrounding existing finish with masking tape.

8. Apply the new finish over the patched area and texture to match the surrounding finish. NOTE: Do not sand the patched area prior to finish application.

9. If the entire wall is to be refinished, it is not necessary to mask off and apply finish at this stage. Refer to the procedure for repairing texture variations for complete details. NOTE: Because RapidPatch is specifically designed to compensate for drying shrinkage, it may b used to repair damaged areas up to 76 mm x 76 mm x 25 mm (3" x 3" x 1").

3.4 EIFS REPAIR – IMPACT DAMAGE:

A. Larger areas of damage will be repaired prior to coating installation.

1. Mask off an area slightly larger than the damaged area. Using a sharp utility knife, hand or circular saw with a carborundum blade, cut into the EIFS down to the substrate, outside of damaged area. Remove the damaged EIFS exposing a neat uniform size area slightly larger than the damage area.

2. Grind off finish a minimum 76 mm (3") to expose the existing base coat layer. CAUTION: Care should be taken not to damage the reinforcing mesh with the grinder. The edges of the finish should be sharp, clean and non-tapered beyond the cut out area.

3. Using the appropriate fasteners and/or adhesive install EPS. Ensure overall tightness at the cut line and sliver if necessary.

4. Apply new base coat (cementious/noncementious) and mesh overlapping onto existing exposed base coat layer approximately 64 mm (21/2"). Ensure that the newly applied base coat is flat and is seated approximately 1.6 mm (1/16") below the surface of the existing finish. Allow to fully dry (minimum. 24 hours).

5. If necessary again precisely mask off the existing finish. Apply new finish and blend new finish into existing finish. While the finish is still wet, remove the masking tape and feather the edges of the patch so they will blend with the surrounding area. Use a brush, nail, toothpick or similar tool to blend the edges of the patch and to precisely match the texture of the patch with the surrounding area. Proper execution of this step is critical to the success of the patch.

NOTE: Environmental conditions, dirt, and exposure will alter the existing color slightly. A final coating of Tuff-Coat is recommended on the total wall surface to ensure color uniformity between patched areas and existing finish coat.

3.5 EIFS REPAIRS - REATTACHMENT OF EIFS:

A. All loose or un-attached EFIS will be re-anchored before repairs and coating are performed. Repair involves adding mechanical fasteners to anchor the EIFS back to the substrate and

refinishing the affected areas. The fastening schedule will need to resist structural loads (i.e. wind) and has to be properly evaluated for the specific building.

3.6 PREPERATION

A. Clean substrate to remove any and all surface contaminants. Surfaces to be coated must be cleaned to a sound surface. Refer to your Garland representative for specific preparation techniques.

B. Mask-off all adjoining areas that are not to receive the elastomeric wall coating.

C. Provide a suitable workstation to mix the coating materials.

D. Concrete: Special attention should be given to smoothness of surface and freedom from contaminants, including paint or previous coatings. Consult your Garland representative for alternate procedures for coating over existing paint. Such procedures are highly dependent on specific job conditions. Curing compounds, if used, shall be removed either by blast media or etching. In the event specifications are not met, the following corrective procedures are recommended.

E. Cleaning Methods:

1. Nontoxic Biodegradable Cleaner: Nontoxic Biodegradable Concrete & Masonry Cleaner: Scrape, sand, or wire brush all hard or glossy surfaces and residual contaminants to assure effective cleaning. Use the most abrasive methods necessary to remove all contaminants that will inhibit the cleaning solution from properly saturating the substrate.
   Rinse the substrate to be treated thoroughly with clean water to remove excess debris and dampen the surface. Beginning at the top of the substrate working down to the bottom, generously apply the B-Clean solution directly to the affected areas using overlapping patterns. Allow the solution to soak into surface for 20-30 minutes. Do NOT allow surface to dry. Reapply a light mist of the solution intermittently to ensure the surface remains damp. Depending on the degree of contamination and exposure a stiff bristle brush may be required once the solution reacts. Next, using overlapping patterns rinse the surface from top to bottom with water. Additional applications may be required dependent upon the severity of the contaminant, using the same approach as
   above. Allow the substrate sufficient time to dry.

2. Solvent & Acid Cleaners: Wipe up grease or oil with a solvent and absorbent material. Disposal of this material should be in accordance with local laws and codes. Wash with solvent-alkaline cleaners diluted one part cleaner and five parts water. Rinse thoroughly with clean water. If evidence of oil film remains as indicated by water “beading,” etch surface with 10% solution muriatic acid. Agitate surface with stiff bristle broom; then rinse with clean water.

Remove curing compounds by etching with 10% muriatic acid followed by clean water rinse. Allow to thoroughly dry before applying coating. Grinding or sandblasting can remove heavy deposits of contaminants. Any residual traces of asphalt stains must be sealed with an epoxy primer to avoid staining of light colored top coats. Apply primer in two coats and allow a minimum of 48 hours cure time.

F. Cracks less than 1/16" (1.5 mm) wide shall be sealed after cleaning has been performed using an elastomeric hybrid sealant. Crack shall be cleared of all loose debris, dirt and widened slightly at the surface to accommodate elastomeric hybrid sealant. Apply elastomeric hybrid sealant by knifing into crack or gunning over crack surface, followed by tooling to match adjacent surface profile, pressing the sealant into the crack cavity to fill completely.

G. Cracks 1/16" (1.5 mm) to 1/8" (3.0 mm) wide shall be routed to a ¼" to ½" groove, backer rod shall be installed, and groove shall be caulked with elastomeric hybrid sealant. Fill grooves flush with adjacent surfaces.

H. Allow sufficient curing time for all sealants to dry-through before proceeding with elastomeric coating application – at least 1 hour not exceeding 3 hours prior to stripe coating with approved elastomeric coating.

I. All sealed expansion joints or sealant repairs must be stripe coated within 1-3 hours with a half inch nap roller or approved brush extending the coating a minimum of 2 inches past the perimeter of the joints sealant or sealant repair ensuring a good protective base of the elastomeric coating is present.

I. Defective mortar or stucco areas should be repaired using a cement-based patching compound.

3.7 INSTALLATION

A. Technical Advice: The installation of this elastomeric coating system shall be accomplished in the presence of, or with the advice of the manufacturer's technical representative.

B. Joint Treatment:
   1. Non-moving Cracks: Stripe coats all non-moving cracks. Fill the crack first with a bead of Tuff-Stuff MS sealant and strike flush. After filling, apply Tuff-Coat for a distance of 2" on each side of the crack 16-20 mils thick and allow curing. When applying the elastomeric coating system on the wall, go over the stripe coat to achieve a total thickness of 48-52 mils.
   2. Moving Cracks: Remove all dirt and loose chips of concrete from the crack. Fill with Tuff-Stuff MS and strike flush with the wall surface. Center 4" wide piece of polyester tape over the crack and adhere it firmly and thoroughly to the wall. Stripe coat 16-20 mils of Tuff-Coat over the polyester tape and for 2" on each side of the crack. When applying the elastomeric coating system on the wall, go over the stripe coat to achieve a total thickness of 48-52 mils.

3. Control Joints: Place a backer material (solvent expanded plastic such as polyethylene or polypropylene) in joint. The backer material should be oversized so it can be compressed into the joint and flush to the wall surface. Apply a bead of Tuff-Stuff MS sealant over the backer rod sealing the joint and strike flush with the wall surface.

C. Elastomeric Coating: Apply Tuff-Coat to secure a total minimum coverage of 2 gallons per 100 square feet (total wet film thickness 32 mils). Product shall be applied by phenolic core roller or airless spray at a rate of 100-200 sq. ft. per gallon depending on the porosity and roughness of the surface with a minimum 2-coat process.

D. Elastomeric Coating: Apply Tuff-Coat Textured to secure a total minimum coverage of 2 gallons per 100 sq. ft. (Total wet film thickness 32 mils). Product shall be applied by phenolic core roller at a rate of 60-80 sq. ft. per gallon depending on the porosity and roughness of the surface with a minimum 2-coat process. (Cannot spray this version).

3.4 CORNER GUARDS – INSTALLATION

A. Where indicated at pre-bid meeting and onsite project walk-through, install vinyl/plastic corner guards.

B. Corner Guards Installation – See sample installation instructions (Pg. 21)

3.5 FIELD QUALITY CONTROL

A. The contractor for work under this section shall maintain a quality control program specifically to verify compliance with this specification. A daily log shall be kept to record actions in the field.

B. Inspections: A minimum of three (Substrate, Application and Final) inspections by an approved manufacturer's representative will be required on all projects requiring a warranty.

END OF SECTION


All existing vertical joints to be removed and replaced
with backer rod and new Green-Lock XL sealant
FITTERS


Any sealant that touches EIFS will be replaced
Phillies
PHILLIES
ADMINISTRATION OFFICES


Spectrum FIELD
Color CMU does not get painted.
Provide tuck-pointing where necessary
Sealant from CMU to concrete to remain


Sealant that touches CMU and concrete to remain in tact - Not Included in scope of work

09800-21

Installation Instructions

Tape-on Corner Guards

Please read all instructions before installing corner guards.

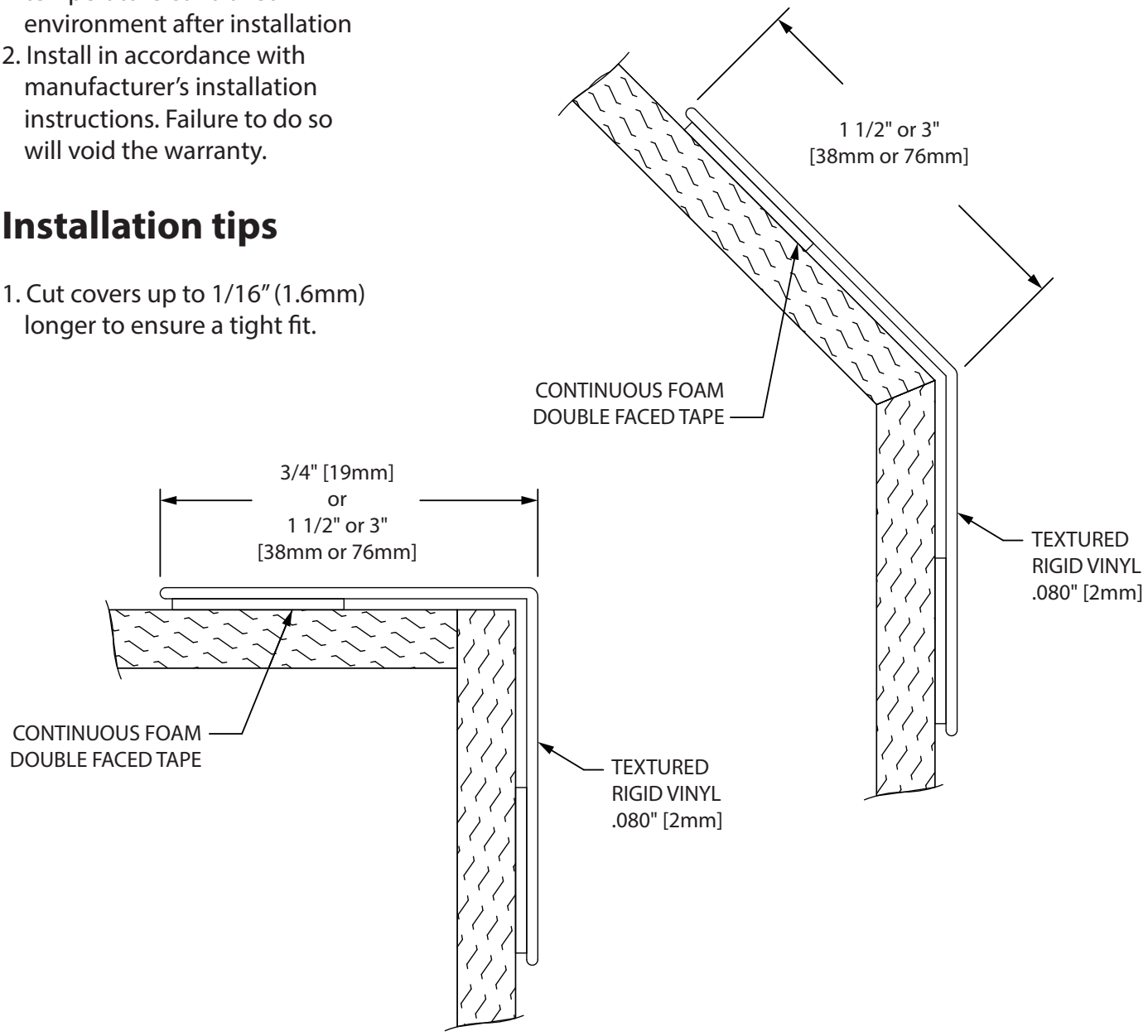
Important

1. Acclimate materials 24 hrs before installation. Maintain temperature controlled environment after installation
2. Install in accordance with manufacturer's installation instructions. Failure to do so will void the warranty.

Installation tips

1. Cut covers up to 1/16" (1.6mm) longer to ensure a tight fit.

Section View



Recommended tools

Safety Glasses, Tape Measure, Level, Power Drill, 1/4" Socket, Drill Bits - 1/4" masonry (concrete/concrete block), Power Miter Saw, 10" Blade with 60-80 Carbide Tipped Teeth

IPC.431/REV.4

Installation Hotline • 866.EZINPRO
Inprocorp.com • 800.222.5556 • 262.679.9010
World Headquarters S80 W18766 Apollo Drive, Muskego, WI 53150 USA

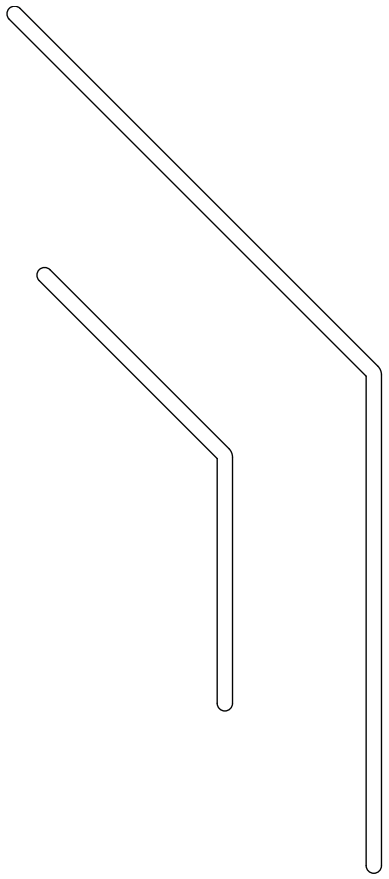
IPC®
DOOR + WALL PROTECTION SYSTEMS
A DIVISION OF INPRO®

Installation Instructions

Tape-on Corner Guards

Please read all instructions before installing corner guards.

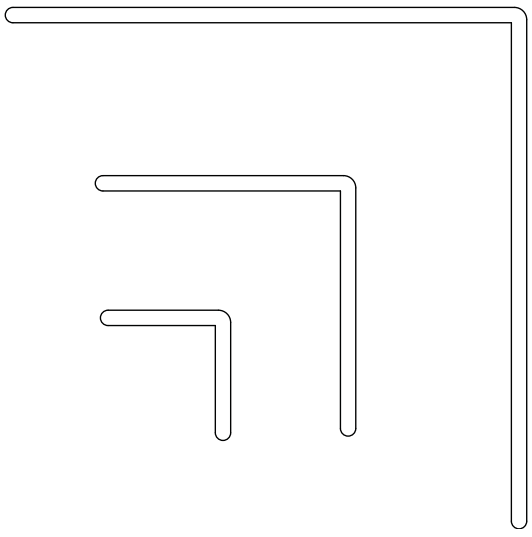
Components



CORNER GUARD HEIGHT

WING SIZE	PART #	4'	8	9'	12'
	1 1/2"	248135N	296135N	209135N	212135N
	3"	348135N	396135N	309135N	312135N

TEXTURED RIGID VINYL
.080" [2mm]



CORNER GUARD HEIGHT

WING SIZE	PART #	4'	8	9'	12'
	3/4"	3448N	3496N	3409N	3412N
	1 1/2"	11248N	11296N	11209N	11212N
	3"	3348N	3396N	3309N	3312N

TEXTURED RIGID VINYL
.080" [2mm]

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Installation Instructions

Tape-on Corner Guards

Please read all instructions before installing corner guards.

FIG. 1

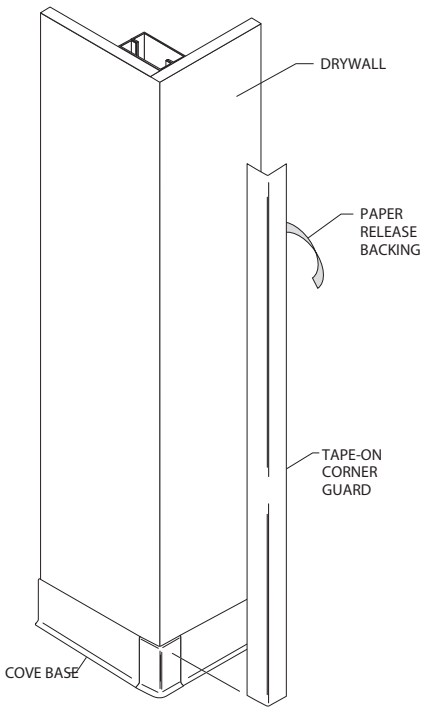
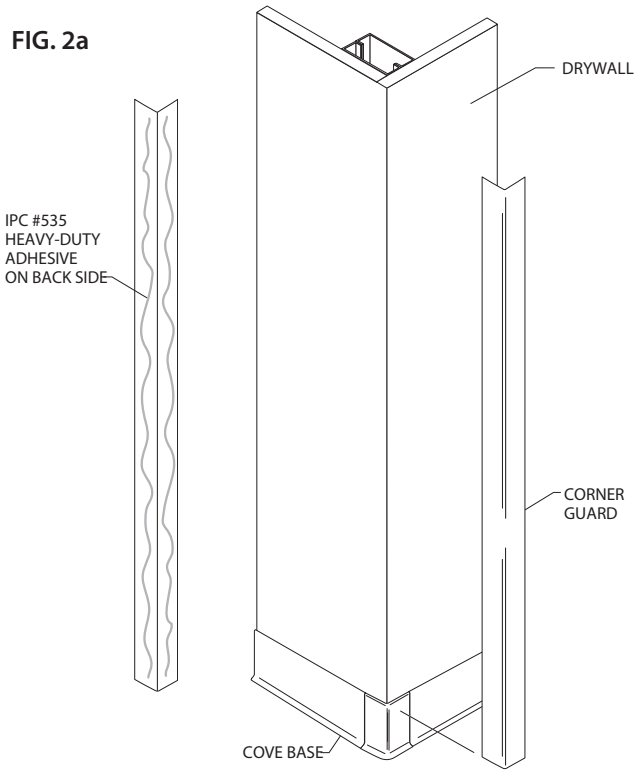


FIG. 2b

FIG. 2a



1. Allow corner guards to reach room temperature before installing. The wall surface that the corner guards are to be applied must be dry and free of dirt, dust, oil, loose paint, wax and grease.

2. TAPE-ON INSTALLATION

Peel the paper release backing from the corner guard. Starting at the bottom, position the corner guard on the wall. Apply firm pressure to the entire surface of the corner guard to ensure a firm bond. An extension roller will aid this step. SEE FIG. 1

Note: In humid conditions or when corner guards are not adhering with foam tape, the installation may require the addition of PL Premium Adhesive.

3. WITHOUT TAPE INSTALLATION

When adhering to textured or difficult surfaces, such as glazed block or wallpaper, use IPC #535 Heavy-Duty Adhesive to adhere corner guards. Apply a bead of IPC #535 in a zig-zag pattern over the back of the corner guard (SEE FIG. 2a). Immediately position corner guard on the wall and apply pressure until a tight fit is achieved. An extension roller will aid this step. SEE FIG. 2b

Adhesive Coverage: One 10.6 oz cartridge of IPC #535 Heavy-Duty Adhesive will adhere the following corner guards based on an approximate cover of 70 lf per cartridge.

Wing Size	Height	# of Corner Guards per Cartridge
3/4", 1-1/2", 2"	3'	11
1-1/2", 2", 3/4"	4'	8
3"	3'	6
3/4", 1-1/2", 2"	8'	4
3"	4'	4
3"	8'	2
3"	12'	1.5

Installation tip when installing corner guards on walls painted with Low or Zero VOC paints.

Corner Guards adhered to walls painted with Low or Zero VOC paints may have adhesion problems when using foam tapes. To improve adhesion follow the steps listed below:

1. Apply de-natured alcohol to a clean soft cloth. Wipe the installation area on the wall with the de-natured alcohol.

2. Allow the wall to completely dry.

3. Once the wall is completely dry, remove the release liner from the foam tape on the corner guard. Position the corner guard at the correct height on the wall making sure it is plumb. Press the corner guard to the wall making firm contact between the wall and each piece of foam tape, ensuring that there are no air pockets between the foam tape and wall.

Caution: De-natured alcohol is a flammable liquid. Completely read the label, safety data sheet and follow all safety pre-cautions when using this solvent. Test the use of de-natured alcohol in an inconspicuous area of the wall to make sure the paint is not damaged.

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