

ITW TACC – Z100 Guide Specification

SECTION 061120

POSTFORMABLE ADHESIVE

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes postformable adhesive.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Certificates:
 - 1. GREENGUARD Children & Schools.
 - 2. GREENGUARD Indoor Air Quality.
 - 3. SCAQMD (South Coast Air Quality Management District), Rule 1168.

1.3 REGULARY REQUIREMENTS

- A. SCAQMD (South Coast Air Quality Management District), Rule 1168.
- B. California Air District Regulations.
- C. Ozone Transport Commission (OTC) model Rule for Adhesives and Sealants.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Postformable Adhesive:
 - 1. Z100 Solvent-Free Postformable Adhesive manufactured by ITW TACC (Basis of Design).
 - a. 56 Air Station Industrial Park, Rockland, MA 02370.
 - 2. Or equal.

2.2 POSTFORMABLE ADHESIVE

- A. Description:

1. High-strength contact adhesive that combines high performance with regulatory compliance. Exceptional heat resistance and aggressive strength make Z ideal for postforming operations.
2. Specially formulated for those operations looking to reduce the cost and time of drying current, conventional water-borne adhesives. Z combines zero flammability, zero VOC, zero methylene chloride and zero HAPs with high bond strength and postformable heat resistance.

B. Advantages:

1. No Solvents.
2. Long Open Time.
3. High Heat Resistance.
4. Postformable.
5. Quick Drying.
6. High Yield.
7. Non-flammable.
8. Excellent Adhesion.

C. Physical Properties:

1. Base: Polychloroprene.
2. Solvent: Latex Emulsion
3. Solids Content: 55.1%.
4. VOC Content: 0 g/l (EPA Method 24).
5. Shelf Life: 12 months.
6. Viscosity: 200 – 1,000 cps.
7. Flashpoint: No Flash to Boiling.
8. Freeze/Thaw: Do not freeze.
9. Density: 9.14 lbs/gallon.
10. Colors: Clear, Green.
11. Coverage: 913 square feet per gallon at 2.5 dry grams per square foot.
12. Formaldehyde: No urea formaldehyde added during adhesive manufacturing.
13. Packaging: 5 gallon pail, 55 gallon drum.

D. Certification:

1. GREENGUARD Children & Schools Certified.
2. GREENGUARD Indoor Air Quality Certified.

E. SCAQMD: Meets SCAQMD, Rule 1168 (less than 250 g/L VOC).

F. Contributes to LEED and other green building rating system credits:

1. LEED-NC and LEED-CI EQ Credit 4.1.
2. LEED for Schools EQ Credit 4.
3. LEED Core & Shell EQ Credit 4.1.
4. LEED-EB MR Credit 3.
5. CHPS® (Collaborative for High Performance Schools) EQ Credit 2.2.
6. Green Guide for Health Care EQ Credit 4.1.
7. NAHB Model Green Home Bldg Guidelines – Sect 7, Global Impact 7.1.3.

2.3 APPROVED SPRAY EQUIPMENT

- A. Spray equipment must have non-corrosive fittings, passages, fluid nozzles and needles. Hoses must be nylon-lined or plastic. An in-line filter between pump and spray gun is required. Apply a uniform, finely atomized spray coating covering 100% of the surface.
- B. Manual:
 - 1. US Legends, 95 Tornado Gun:
 - a. System 500 – 5 gallon pressure pot:
 - 1) Fluid Pressure: 5-15 psi.
 - 2) Atomization Pressure: 20-40 psi.
 - b. System 5000 – 55 gallon drum pressure system:
 - 1) Fluid Pressure: 2-8 psi.
 - 2) Atomization Pressure: 20-40 psi.
 - 2. C.A. Technologies, Panther P100G 1.8 X 1590 spray gun:
 - a. .Pressure pot and hoses with non-corrosive fluid paths.
 - b. Fluid Pressure: 5-15 psi.
 - c. Atomization Pressure: 20-40 psi.
 - 3. Binks, Mach 1 HVLP spray gun:
 - a. 94 fluid tip, 54 – 3941 needle.
 - b. 94P air cap.
 - c. Fluid Pressure: 10-30 psi.
 - d. Atomization Pressure: 10-30 psi.
- C. Automatic:
 - 1. Binks, Mach 1A HVLP spray gun:
 - a. 94 fluid tip, 47 – 478 needle.
 - b. 94P air cap.
 - c. Fluid Pressure: 10-30 psi.
 - d. Atomization Pressure: 10-30 psi.

PART 3 - EXECUTION

3.1 APPLICATION, GENERAL

- A. Comply with adhesive manufacturer's written instructions for installation.

3.2 ADHESIVE APPLICATION

- A. Use only after careful consideration of the warnings, directions, and first aid instructions given. Surfaces to be bonded should be clean, dry and free of any dust, loose paint, wax, moisture, dirt, grease, oil, rust, or other contaminants.
- B. Non-porous surfaces should be thoroughly roughened by sanding and wiped free of dust. Stir thoroughly before using.

- C. Adhesive should be at 65°F or higher. For best results, adhesive and materials to be bonded should be 65°F or higher. Working at lower temperatures will slow the rate of drying and may also affect the final bond. Do not freeze.
- D. Apply a uniform coat of adhesive to both surfaces by using a brush, paint roller, or stainless steel spray equipment. Spray equipment must have stainless steel fittings, passages, fluid nozzles and needles. Hoses must be nylon lined or plastic. Apply 2.0 to 2.5 dry grams of adhesive per square foot on both surfaces to be bonded.
- E. Be sure to have complete coverage of the surfaces. If brush or paint roller applied, or substrates are porous, apply two coats of adhesive to avoid soak in. Allow the first coat of adhesive to dry completely before applying the second coat.
- F. Do not apply adhesive in the direct sunlight. Both surfaces must be allowed to dry before bonding. This will usually take from 5 to 30 minutes at room temperature under normal conditions. Heat and humidity, or cold weather can cause longer drying times.
- G. Preheating substrates and the use of ovens, fans, or lamps will result in shorter drying times. Daily pretesting is recommended prior to use.
- H. The adhesive is dry when a translucent, glossy coat is obtained. Cloudy or opaque areas indicate incomplete drying. Dull areas indicate insufficient adhesive. Complete the bond within 1 hour (under normal conditions) after the adhesive is dry.
- I. If the two surfaces don't grab immediately when brought into contact, they have dried too long. Position coated surfaces carefully before putting them together since no shifting is possible once contact is made. Bring surfaces together and immediately apply firm pressure over entire surface working from the center to the edges. Apply uniform pressure over 100% of the area to be bonded.
- J. A pinch roller or rotary press is ideal, using as much pressure as possible without crushing the substrates. The minimum recommended pressure would be a 3-inch rubber "J" roller used attentively (30 – 40 psi). Replace lid after each use and secure tightly for storage. For best results store between 60°F and 90°F. Store out of direct sunlight in a cool, well-ventilated area.
- K. Avoid storing container directly on the floor or against an outside wall. Do not freeze. Do not expose bonded parts to direct sunlight or excessive heat for at least 72 hours. Do not use on some vinyls or polystyrene foam. Some vinyls contain plasticizers, which can, over time, soften and dissolve the bond. When in doubt, or if product is to be used on light colored vinyls, or other light colored materials, conduct test on the product to be bonded before use.
- L. Copper or its alloys should not be used to transfer or contain this adhesive.
- M. Do not laminate copper or its alloys with this adhesive.
- N. Clean-up: Use warm, soapy water to clean wet adhesive from spray equipment, brushes or rollers. Use manufacturer's brand biodegradable citrus solvent to remove dried adhesive.

END OF SECTION 061120