

SPECIFICATION DATA

1. PRODUCT NAME

GUNTHER ULTRA/BOND®
Mirror Mastic, GUNTHER
EXTRA/BUILD® Mirror
Mastic, And GUNTHER
PREMIER® Mirror Mastic
(LOW VOC)

2. MANUFACTURER

Royal Adhesives & Sealants
2001 W. Washington St.
South Bend, Indiana 46628
1-800-227-6181
Fax: 574-246-5416

3. PRODUCT DESCRIPTION

Gunther Ultra/Bond, Gunther Extra/Build, Gunther Premier, are high quality adhesives formulated to provide a strong, permanent bond between glass and mirrors, (meeting federal specifications), and various substrates. In addition, Gunther Premier can be safely used on acrylic mirror.

Gunther Ultra/Bond's high strength, fast setting formula provides for a build out of 3/4" and can compress to 1/32" for mirror installations requiring close tolerances such as overlays, mirrored furniture and medicine cabinets. Ultra/Bond is ideal for installing vanity mirrors and for assembly lines using pneumatic pumping equipment.

Gunther Extra/Build's viscosity provides for a build-out of 2 1/2" without sag for custom mirrored walls or vanities where construction is such that there

are gaps over 3/4" between the mirror and substrate.

Gunther Premier is a very versatile product that can be built out to 2 inches or squeezed down to 1/16 of an inch. Premier can be used on acrylic mirror and is designed for installations where movement is an issue such as gyms, elevators, and dance studios.

Other Features

- Convenient drying - Gunther Ultra/Bond, at 72° F, achieves approximately 30% strength in 24 hours, full cure in 28 days. Gunther Extra/Build, at 72°F, achieves approximately 20% strength in 48 hours, full cure in 30 days. Premier achieves 30% strength in 24 hours, full cure in 7 days. Curing time depends on temperature, amount of product used, porosity of substrate, and amount of air reaching product.

- Easy working consistency year round - At temperatures ranging from 10° F to 100° F, Gunther Ultra/Bond and Extra/Build are easy to apply and remain gunnable from the cartridge. Premier is gunnable from 40°F to 100°F. (For best adhesion, the two surfaces must be dry, clean and above 60° F.)

- Durable - Gunther Ultra/Bond and Extra/Build have special formulas which prevent chemical breakdown over time. They will not become brittle. Gunther Premier remains very flexible, enabling it to absorb movement due to expansion and

contraction. It will not shrink or become brittle with age.

- Versatile - Gunther Mirror Mastics will adhere to a wide variety of substrates including drywall, wood, metals, glass, marble and tile. (Note installation section.)

Limitations:

Ultra/Bond and Extra/Build are not to be exposed to continuous ultra-violet light. Do not use on Styrofoam, plastics or acrylic mirror. (As noted above, Gunther Premier is safe for acrylic mirror meeting federal specs.) New copper-free, no-lead, low-lead or traditional mirrors that may have changed paint backing need to be tested prior to use of Gunther products.

Technical Data:

Base: Ultra/Bond and Extra/Build - Synthetic Rubber
Premier – Urethane

Viscosity: Ultra/Bond:

600,000 to 700,000 cps

Extra/Build:

Approx. 1,000,000 cps

Premier:

Approx. 1,500,000 cps

Color: Ultra/Bond – Tan
Extra/Build – Black
Premier – Gray

Application:

Ultra/Bond® - caulking gun,
spatula, power pump

Extra/Build® - caulking gun,
spatula

Premier® - caulking gun
(min.12:1 ratio suggested)

Mounting Time:

Ultra/Bond will skin in approximately 20 seconds and will rewet upon application. Mounting time -10 minutes. Extra/Build will skin in approximately 30 seconds and will rewet upon application. Mounting time - 10 minutes. Premier will skin in 60 minutes. Mirrors can be mounted up to 20 minutes after application.

Open Time:

Ultra/Bond and Extra/Build have 20 - 30 minutes open time depending on temperature and humidity. If product skins in containers, the skin can be stirred in and re-wetted.

Coverage:

One 300 ml cartridge with a 3/8" bead covers - 15 lineal feet.

Clean up:

Remove excess with mineral spirits. On carpet let product set for 1/2 hour and gently pull from fibers.

Storage:

Store at less than 85° F. Freeze-thaw capability -7 times.

Water Resistance:

Waterproof after fully cured.

Solvent:

Ultra/Bond –Toluene, Textile Spirits, Acetone

Extra/Build – Toluene, Heptane, Mineral Spirits

Premier – Xylene, MDI (Low VOC)

Shelf Life:

12 Months in non-opened containers stored at 75 °F or lower.

Packaging:

Ultra/Bond

300 ml Cartridges

(24 cartridges per case)

1 Gallon Cans

(4 gallons per case)

5 Gallon Pails

50 Gallon Drums

Extra/Build

300 ml Cartridges

(24 cartridges per case)

1 Gallon Cans

(4 gallons per case)

Premier

10.3 Fl. Oz. Cartridges

(12 cartridges per case)

Caution- Flammable

Vapors from **Ultra/Bond** and **Extra/Build** may ignite explosively; prevent build-up of vapors. Open all windows and doors. Use only with cross ventilation. Do not smoke. Extinguish all flames and pilot lights and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Close container after use. Keep away from heat, sparks and open flame.

Keep out of reach of children.

Installation:

Check and prepare substrates, all substrates should be plumb and square. Check for dampness or the possibility of dampness occurring after installation. Check for unsealed surfaces, loose plaster, dust, or poor quality or loose paint. Oil based paints found in older construction can become very brittle in time and cannot be depended upon to support a mirror. Also some lower cost primers dry with a powdery surface which makes adhesion impossible. Sand through to the base surface where the product will be applied. Clean the area and seal with a good quality, environmentally safe, acrylic sealer like Gunther Prime-N-

Seal™. **Most substrates need to be sealed.** Lacquer sealers should not be used. Many lacquer sealers are not effective on drywall or wood.

The strength of the mastic is only as good as the substrate.

SUBSTRATES:

Concrete, Plaster, Drywall and Sheet Rock, Hard Board, Chipboard, Green Board All porous substrates such as those listed above should always be sealed. A sealer adds strength to the wall and prevents caustic chemicals from attacking the mirror backing.

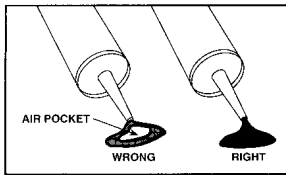
Chipboard, or particleboard, is produced with wax in the molding process. Because the wax is fused to the wood particles, wax will be present on the board surface. Sealers will not adhere to wax. Sand the chipboard or particleboard before applying sealer; green board also must be sealed because it contains chemicals that cause silver deterioration.

Tile, Glass, Marble, Steel or other Metals

Surfaces must be clean and dry. Metals must be free of rust, oil or paint. These surfaces do not need to be sealed. With tile, sand and clean for better adhesion. Gunther Ultra/Bond® is recommended for these substrates.

Application

Ultra/Bond and Premier should be applied only in vertical beads the full length of the mirror, 5-6" apart. Allow 3" from the mirror edge to begin or end a bead. Extra/Build® is the only mastic that can be applied in 4-5" diameter patties.



Do not apply mastics in a circle where an air pocket could collect solvents and possibly extract material that could be damaging to the mirror. The best way to apply Extra/Build or premier from a cartridge is to start from the center and let the mastic naturally expand out as it's being gunned.

Mechanical support systems are recommended for all mirror applications. This includes the use of mechanical fasteners at the top and bottom of the mirror.

Acrylic Mirror/Painted Glass
Do not apply Ultra/bond or Extra/build to acrylic mirror or painted glass. **GUNTHER PREMIER IS RECOMMENDED FOR ACRYLIC MIRROR** by the manufacturer. Premier can be use on painted glass.

DO NOT APPLY Gunther Mirror Mastics to vinyl backing.

Wallpaper or Painted Surfaces
 Wallpaper does not make a strong substrate for mirror installations. Remove wallpaper and apply mastic directly to the re-sealed wall. Never install mirrors on new plaster or on a painted wall.

Fire Retardant Plywood and Wolmanized Wood
 These are not recommended as substrates when using mirror mastic for mirror installations.

Chemicals in the wood will cause loss of adhesion over time.

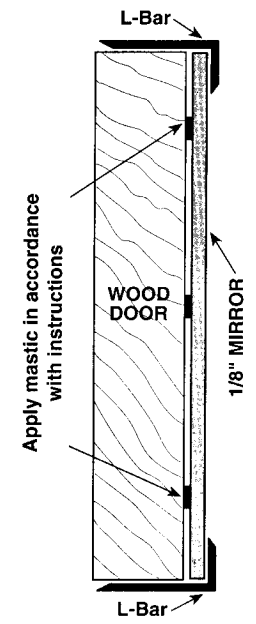
SPECIAL APPLICATIONS

Ceiling Installation:
CAUTION SHOULD BE USED IN HORIZONTAL INSTALLATIONS.
 Glass is a brittle product subject to thermal and seismic shocks making it difficult to guarantee a permanent ceiling installation. Most organizations responsible for industry installation standards, such as the California Glass Association, do not sanction the practice of mounting mirror on an overhead, horizontal surface.

Mirror Overlays:
 Working with mirror strips can be difficult. For overlays, use Gunther Ultra/Bond or Premier to achieve a fast set and strength along with double-faced tape. Ultra/Bond has the capability to compress to 1/32", Premier to 1/16", providing a professional installation. Double-faced tape is used only for initial adhesion to support the mirror. The mastic is for long term adhesion and strength. Mastic beads of 1/4" to 3/8" thick by 6" long, leaving a 3" gap between where the bead starts will improve curing time. NOTE: Check with mirror manufacturer on recommended double-faced tape.

Mirrored Furniture:
 Close tolerances are very important with mirrored furniture. Gunther Ultra/Bond will squeeze down to 1/32" allowing for close tolerances and proper fit. As previously mentioned, beads should be used to enhance mastic curing and double-faced tape can be used when necessary to support.

Mirrored Doors:
 The diagram shows a secure method of installing mirror on doors. Make sure the door is not treated with a fire retardant. Also, any varnish or finish on the door should be sanded away where the mastic is to adhere. Use Gunther Ultra/Bond in beads for best adhesion. Allow extra cure time if applying mastic to non-porous substrates.



Warranty
 Under no circumstance will Gunther Mirror Mastics or Royal Adhesives & Sealants LLC., the manufacturer, or the seller of its products be liable for incidental or consequential damages arising from the use of any of its products. Any damages in connection with the use of any of Gunther's products by the buyer, seller, user or any other person are strictly limited to the purchase price of the product only. Customer accepts full responsibility. All installation guidelines must be followed. Refer to literature or call 1-800-

227-6181 for installation guidelines.

Availability

For the name and telephone number of your local distributor or representative, or for technical assistance, please call.

Contact:

Gunther Mirror Mastics

1-800-227-6181. We can also be reached by fax at 574-246-5416. See our web site at www.gunthermirrormastics.com

**ISO 9001:2000
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