Introduction
Impact exceeding the strength of the reinforcing mesh used in EIFS construction will rupture the EIFS surface. EIFS can be designed to have tremendous impact strength; before repairing punctured EIFS consideration should be given to the anticipated use conditions. If EIFS are expected to withstand routine impact, a high-impact surfacing system should be installed. In addition to creating a durable repair, installing an all-new surfacing system may provide an enhanced appearance.

Equipment
- Appropriate personal protective equipment
- Stainless steel trowel and margin trowel
- Plastic float
- Paint brush
- Scraper
- Coarse sandpaper and/or a hand-held grinder
- Scoring knife
- Drill and paddle mixer

Materials
- Gel paint remover
- Plastic pails
- Masking tape
- Senergy ALPHA or ALPHA DRY Base Coat
- Senergy FLEXGUARD 4 Reinforcing Mesh
- Optional BASF HI-IMPACT 20 Mesh
- Color and texture matched Senergy Finish
- EPS slivers

Procedure
1. If working in an area where dust control is needed, use of paint remover is recommended. Apply paint remover gel around the puncture and allow it to soften the finish. Use a scraper to remove the finish, and coarse sandpaper to remove base coat down to the reinforcing mesh. Alternately, a hand-held grinder can be used to remove both finish and base coat. Do not grind into reinforcing mesh; remove finish and base coat at least 5-inches in all directions surrounding the puncture.
2. Cut lamina cleanly around the damaged area, ensuring that at least 2.5-inches of intact base coat and mesh is present between the damaged area and surrounding EIFS lamina.
3. Remove EPS from the damaged area, creating a smooth substrate to which new EPS can be fastened. Cut new EPS to the shape of the EPS void, creating a tightly-fitting repair. Apply Senergy ALPHA or ALPHA DRY Base Coat to the new EPS and press it into place. Allow the adhesive to dry. Insert EPS slivers into any gap greater than 1/16-inch wide. Sand or rasp the surface flush with adjacent EPS.
4. Cut Senergy FLEXGUARD 4 Reinforcing Mesh such that it overlaps at least 1-inch onto existing base coat and mesh. Tape around the puncture, then embed Senergy FLEXGUARD 4 Reinforcing Mesh into ALPHA or ALPHA DRY Base Coat, ensuring that fresh base coat and mesh is level with the existing lamina. Use a double layer of FLEXGUARD 4 when repairing damaged corners.
5. Apply color-matched and texture-matched Senergy finish. See Figure 5. Float the finish to match existing finish. Remove the masking tape and use a brush to blend the wet edge of the finish into existing finish, and allow to dry.

Do
- Realize that repairs performed using this procedure may be visible after repairs are complete.
- Consider recoating or resurfacing affected areas if aesthetic repair is needed.
- Consider resurfacing all areas that are subject to impact using BASF HI-IMPACT 20 mesh and FLEXGUARD 4 Reinforcing Mesh. This will create a strong, durable and attractive repair.

Do Not
- Fill gaps between insulation board with base coat.

Technical Information
Consult the BASF Technical Services department for specific recommendations concerning all other applications. Consult the Senergy website, www.senergy.basf.com, for additional information about products and systems and for updated literature.
Technical Bulletin
Senergy EIFS Maintenance and Restoration Technology
Procedure for Repairing Puncture Damage in EIFS