



## Procedural Bulletin / Block & Concrete Wall Waterproofing

No. 33-5 Effective Date January 2020

# Gill 33<sup>®</sup> - Superbond

**Purpose:** This Procedural Bulletin No. 33-5 is the guideline for waterproofing block and concrete walls. It also describes the correct procedure to follow for stopping a block or concrete wall from leaking. All references to Gill 33<sup>®</sup> also include the MCI<sup>®</sup> variant.

### Materials:

- Type I or III fresh<sup>1</sup> portland cement
- Sand - Use washed concrete sand only for larger patches where feather edge is not required. Use washed sand of a #30 grit or less where width is 3/8 inch or less.
- Gill 8 Horizontal / Vertical Mix or Gill 29 Gill Crete may be substituted for cement / sand combination. Refer to Procedural Bulletin No. 8 and 29 respectively.
- Water - Use potable water, do not use industrial water.
- Gill 33<sup>®</sup> Superbond

### Procedure:

**Surface Preparation:** Clean all loose material from the problem area by sand blasting, water blasting, scarifying, or use a power tool such as a jackhammer. For hydrocarbon contamination, use Gill 27 Etch N Kleen for surface preparation. See Technical Bulletin No. 27 for additional information.

**Mix Design:** Volumetric proportion is one (1) part cement to one (1) part sand. **Use only fresh<sup>1</sup> portland type I or III cement!**

**Pre-soak:** Area to be overlaid/patched must be pre-soaked using water. Follow ACI recommended procedure of "24 hour" pre-soak. Deviation from ACI recommendation may result in bond failure

**Pre-mix:** *Each Gill container should be thoroughly shaken to ensure the micro-silica is fully dispersed in solution and does not adhere to the bottom of the container.* In a separate container, mix a solution of one (1) part Gill 33<sup>®</sup> to four (4) parts water. Note: If this is for waterproofing an ALREADY leaking block or concrete wall, use a ratio of one (1) part Gill 33<sup>®</sup> to three (3) parts water. This Gill Water solution is to be used for all mixing water in the concrete.

**Placement:** Add cement and sand combination to the Gill Water solution to make a brushable slurry. Using a wide masonry brush, completely paint the wall with this slurry. Repeat. These two brush coats will hold against considerable water pressure. In the event there is continued seepage, wet wall with undiluted Gill and heavily dust wall with pure fresh portland cement. The wall at this point should be tacky. Lightly brush over the cement to create a hard surface.

**Equipment Cleanup:** Gill 33<sup>®</sup> will not damage mixers or hand tools. To neutralize the effects of Gill 33<sup>®</sup>, rinse all tools with water.

<sup>1</sup> Test cement for freshness by putting a small amount of cement into a container. Add undiluted Gill 33<sup>®</sup> and create a small, stiff putty ball. If cement is fresh, the ball will be hot in 3-5 minutes. If not, replace cement.