

TL-0033 — PREPRUFE® Waterproofing Membrane—Job Site Preparations and Repair Procedures Technical Letter (US version)

Successful installation of the PREPRUFE® Waterproofing System depends on proper site preparation to prevent membrane damage. The following are guidelines and recommendations to assist both the general contractor and the waterproofing contractor to work together to attain the best possible installation.

Preparation and Repair Procedures

PREPRUFE® Membranes are designed to take normal construction site abuse prior to placement of concrete. However, there is still a risk of damage from other construction activities and from construction materials that are stored on site. Damaged areas must be repaired prior to concrete placement for proper PREPRUFE® performance. Careless placement of reinforcing steel and formwork are common causes of membrane damage. Damage can be prevented or at least corrected if construction activities by other trades are properly planned and coordinated with the waterproofing installer. Communication is critical to ensure that if damage does occur, the waterproofing installer has an opportunity to repair the the damage.

One particular form of damage observed with PREPRUFE®160R Membranes is the fastening of vertical formwork “end dams”, also referred to as “bulk heads”, during the installation of the forms. An end dam is the form-work at the end of an individual section of a concrete pour and generally consists of wood blocking. The problem occurs when the formwork contractor secures the end dam to the waterproofed blind side wall (soil retention system) by installing fasteners that penetrate through the PREPRUFE® Membrane. After the concrete is poured, the forms are stripped and the fasteners are removed, leaving fastener holes and other membrane damage to the PREPRUFE® Waterproofing System.

The repair of holes and damage caused by end dams may be difficult due to working space constraints, job sequencing constraints, concrete “splatter” or debris adhered to the surface of the membrane, and the limited membrane area available to properly install repair materials over the damaged surface.

Repair small punctures 0.5 in. (12 mm) or less and slices by applying PREPRUFE® Tape centered over the damaged area and roll firmly. Repair holes and large punctures greater than 0.5 in. (12 mm) by applying a patch of PREPRUFE® Membrane, which extends 6 in. (150 mm) beyond the damaged area. Seal all edges of the patch with PREPRUFE® Tape, remove the release liner from the tape and roll firmly.

