

SEALING OF PENETRATIONS

(TO BE READ IN CONJUNCTION WITH PRODUCT DATA SHEETS)

PRODUCTS

Xypex Concentrate

Xypex Patch'n Plug



GENERAL:

This method statement details the products and procedures for the sealing of new penetrations and treatment of existing penetrations.

SURFACE PREPARATION:

Where a core hole is required to install the penetration

After the core hole is completed thoroughly rinse the area to remove all dust, dirt and loose material. The surface must be saturated with clean water. Xypex requires a Saturated Substrate and Damp surface (SSD). Concrete surfaces must be thoroughly saturated with clean water prior to the application. Remove excess surface water before the application. If concrete surface dries out before application, it must be re-wetted.

Where an existing penetration is leaking

Create a rout of approximately 25 to 37mm deep and approximately 25mm wide around the perimeter of the penetration. The rout should be preferably square or as close to a "U" shape as practical. A "V" shaped rout is not acceptable.

Thoroughly rinse the area to remove all dust, dirt and loose material. The surface must be saturated with clean water. Xypex requires a Saturated Substrate and Damp surface (SSD).

APPLICATION (NEW PENETRATION):

1. Ensure that both the external surface of the penetration is clean (dirt free) and that the internal face of the penetration hole is clean and moist.
2. Mix **Xypex Patch'n Plug**, three and a half (3.5) parts powder to one (1) part clean water, into a putty like consistency and apply approximately 30mm of material around the penetration to a depth of at least 30mm (depth as measured from exposed face of material to surface).
3. Allow a minimum of 30 minutes for the **Xypex Patch'n Plug** to harden.
4. Mix **Xypex Concentrate**, five (5) parts powder to two (2) parts clean water, into a slurry and apply a brush coat of the material to the exposed face of the **Xypex Patch'n Plug** and to a band around the penetration approximately 15mm wide.
5. Mix **Xypex Concentrate**, six (6) parts powder to one (1) part clean water, as a dry pac and compress into the rout with a hammer and block or pneumatic packing device to an approximately depth of 15mm.
6. Remove any residual product from exposed surfaces of core hole and penetrations.
7. Apply a fine mist spray of water to seal the surface of the dry pac.
8. Mix **Xypex Patch'n Plug**, three and a half (3.5) parts powder to one (1) part clean water into a stiff putty and apply to the rout to return to profile. Allow a minimum of one hour to set and cool

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VICTORIA

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(03) 9543 7933

QUEENSLAND

8/93 Burnside Road
STAPYLTON QLD 4207
(07) 3442 4300

SOUTH AUSTRALIA

Unit 1, 30 Raglan Avenue
EDWARDSTOWN SA 5039
(08) 8297 1288

WESTERN AUSTRALIA

1/44 Sustainable Drive
BIBRA LAKE WA 6163
(08) 9434 3844

HEAD OFFICE

45 Union Road
NORTH ALBURY NSW 2640
(02) 6040 2444

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APPLICATION (LEAKING PENETRATION):

9. Mix **Xypex Patch'n Plug**, three and a half (3.5) parts powder to one (1) part clean water into a stiff putty. Apply **Xypex Patch'n Plug** to approximately half the depth of the prepared rout. The **Xypex Patch'n Plug** should be applied to the full length of the rout. Hold in place by hand, while the material sets and the flow of water ceases. It is necessary to leave the rout free of material to a depth of at least 30mm (depth as measured from exposed face of material to surface).
 10. Allow a minimum of 30 minutes for the **Xypex Patch'n Plug** to harden.
 11. If flows persist, mix **Xypex Patch'n Plug** as above and form into plugs, by rolling the putty in gloved hands, to approximately the size of the rout (typically in a "carrot shape").
 12. Allow the plugs to harden for a minimum of 30 minutes and compress into the base of the rout with a hammer and block until the water flow stops. This may require more than one attempt. It is necessary to leave the rout free of material to a depth of at least 30mm (depth as measured from exposed face of material to surface).
 13. If high pressure, high volume flows exist, identify areas or points of high flow along the rout. At these points position a "bleeder" hose/tube of a size applicable to the flow volume and of a size that will fit within the rout. Install the "bleeder" by applying **Xypex Patch'n Plug** around base of the "bleeder" and into rout area. Ensure that water is primarily flowing through the "bleeder". Hold into position until material sets. It may be necessary to apply more than one batch of **Xypex Patch'n Plug** to attain a firm fit for the "bleeder".
 14. Once all flows are stopped allow as long as possible (minimum one hour) and then carefully remove the "bleeder". Follow the procedure as outlined in steps 11 and 12 above and plug the hole from the bleeder tube.
- Note:** A "bleeder" hose is of sufficient length that the water can be directed away from the work area. It should be smooth surfaced, fairly rigid tubing, for example a garden hose.
15. Mix **Xypex Concentrate**, five (5) parts powder to two (2) parts clean water into a slurry and apply a brush coat of the material to the exposed face of the **Xypex Patch'n Plug**, and to a band around the penetration approximately 15mm wide.
 16. Mix **Xypex Concentrate**, six (6) parts powder to one (1) part clean water, as a dry pac and compress into the rout with a hammer and block or pneumatic packing device to an approximately depth of 15mm.
 17. Remove any residual product from exposed sides of rout.
 18. Apply a fine mist spray of water to seal the surface of the dry pac.
 19. Mix **Xypex Patch'n Plug**, three and a half (3.5) parts powder to one (1) part clean water into a stiff putty and apply to the rout to return to profile.
 20. Mix **Xypex Concentrate**, as above, into a slurry and apply over the repaired area at the rate of approximately **0.8 kg/m²**. The coating must be uniformly applied and approximately 1.25mm thick.
 21. Cure by mist spraying three times daily for two to three days. If this process is impractical apply a mist of **Xypex Gamma Cure**. Mix three (3) parts water to one (1) part **Xypex Gamma Cure**.

DISCLAIMER

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