

# RAPIDPATCH™

DUK458

## Fast Setting, Non-Sagging, Patching Material

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### Description

RapidPatch is a one-component, fast-setting, polymer-modified, fiber-reinforced, cement-based, non-sagging, patching material for Dryvit systems. The product is supplied in 3.78 L (1 gal) plastic pails and, when mixed with water at the job site, produces an easily applied, high performance, non-shrinking, patching material.

### Uses

RapidPatch is an exceptional patching material specially engineered to patch holes in an existing EIF system up to a maximum depth of 2.5 cm (1 in).

### Coverage

3594 cm<sup>3</sup> (230 in<sup>3</sup>) per 3.78 L (1 gal) pail. This fills approximately 25 holes measuring 7.5 cm x 7.5 cm x 2.5 cm (3 in x 3 in x 1 in) in dimension.

### Properties

**Working Time** - After mixing, the working time of RapidPatch is 20-30 minutes, depending on ambient temperature.

**Drying Time** – RapidPatch may be ready for finish coat application in 60 minutes at 21 °C (70 °F), 55% R.H. Lower temperatures and higher humidity will extend the curing time.

### Water Vapor Transmission

(ASTM E96) – RapidPatch is permeable to water vapor.

**Bond Strength:** (ASTM C-297 Modified) – Bond strength between RapidPatch and expanded polystyrene insulation board exceeds the tensile strength [0.142 N/mm<sup>2</sup> (20.0 psi)] of the expanded polystyrene insulation board when test samples are cured for 14 days. The bond strength is 0.122 N/mm<sup>2</sup> (17.2 psi) with an adhesive failure of 19% when

test samples are cured for 14 days and soaked in water for 24 hours.

### Application Procedure

**Job Conditions** – Air and surface temperature for application of RapidPatch must be 4 °C (40 °F) or higher and must remain so until RapidPatch is cured. When ambient temperature is above 24 °C (75 °F), water used for mixing should be chilled to a temperature less than 24 °C (75 °F).

**Temporary Protection** – Shall be provided at all times until patching material, finish and permanent flashings, sealants, etc. are completed to protect the wall from weather and other damage.

**Surface Preparation** – Surface must not be below 4 °C (40 °F) or painted and must be clean, dry, structurally sound and free of efflorescence, grease, oil, form release agents and curing compounds.

**Mixing** – One pail of RapidPatch will produce approximately 3.78 L (1 gal) of RapidPatch mixture. RapidPatch may be mixed by mechanical or manual means. RapidPatch should be mixed to a thick consistency such that it does not sag on the wall.

**Mechanical mixing:** to a clean 3.78 L (1 gal) pail, add 1.30 – 1.5L (1.37-1.58 quarts) of clean potable water. Add the RapidPatch slowly while constantly mixing with 50 mm (2 in) ribbon type mud mixer (such as Marshalltown® Part No. RM771) at 450-500 rpm. Thoroughly mix until uniformly wetted, adjusting consistency with a small amount of water or RapidPatch. Let set for 4-5 minutes. Retemper, adding a

small amount of water if necessary. Material must be free of lumps before using.

**Manual mixing:** add the measured small quantities of RapidPatch to the proper amount of clean portable water in a clean container and mix with a margin trowel. Mix for 3-5 minutes and let it set for 4-5 minutes. Re-mix to break the set for 1 minute and add a small amount of water if necessary. The pot life is 20-30 minutes depending on ambient temperature.

### Application

- A. With a sharp utility knife, cut through and remove the lamina, exposing a neat uniform-sized area of insulation larger than the damaged area. Use a disk grinder or belt sander to remove the finish, exposing the reinforced base coat approximately 75 mm (3 in) around the damage area. Use an 20 grit aluminum oxide disk or belt.
- B. Cut out the loose, exposed foam and reveal fresh foam. Cutting off the foam all the way to substrate is not recommended. When foam in the damaged area is well bound to substrate, care must be taken to expose as little of the substrate as possible and prevent rupturing the surface of the substrate. The area to be patched must be at least 1.9 mm (3/4 in) and 25 mm (1 in) in depth. Deeper patches should be filled with a piece of EPS so the patch is within this range. The EPS can be adhered to the substrate using RapidPatch material.
- C. Precisely mask the surrounding finish with masking tape.

- D. Apply RapidPatch mixture to the damaged area with a margin trowel to a depth of approximately 3 mm (1/8 in) below the existing base coat surface. Also add a small amount of material onto the exposed basecoat surrounding the patch. Place a piece of Detail Mesh over the wet RapidPatch overlapping the existing basecoat a minimum of 25 mm (1). Add additional RapidPatch material to completely fill the damaged area, cover the mesh and feather onto the surrounding basecoat. If the patching material in the damaged area appears loose initially, wait until it stiffens up and level off any imperfections with additional RapidPatch mixture as needed.
- E. When the patching material in the damaged area is stiff enough, use a clean, damp margin trowel, to smooth out the surface. This may be repeated until a satisfactory appearance is achieved. The trowel must be clean and damp prior to each smoothing.
- F. Let RapidPatch set for at least 60 minutes, depending on ambient conditions.
- G. If necessary, again, precisely mask the surrounding existing finish with masking tape.
- H. Install the new finish over the patched area and texture to match the surrounding finish. Do not sand the patched area prior to finish application.

**Note: Because RapidPatch is specifically designed to compensate for drying shrinkage,**

**it may be used to repair damaged areas up to 7.5cm x 7.5cm x 2.5 cm (3 in x 3 in x 1 in).**

**Clean Up** – Clean tools with water while RapidPatch mixture is still wet.

#### **Storage**

RapidPatch pails must be protected from moisture. In hot weather, the pails should be stored in a cool, dry location out of direct sunlight. If RapidPatch is warm or hot, its pot life will be greatly reduced. The shelf life is 1 year from date of manufacture when properly stored in unopened pails.

#### **Cautions and Limitations**

- Clean potable water may be added to adjust workability. Do not overwater.
- Use RapidPatch only when substrate and air temperature will be above 4 °C (40 °F) for 24 hours.
- Avoid working in direct sunlight and keep mixed RapidPatch in the shade.
- Wear protective eyewear and clothing since the product does contain cement, which can irritate.

#### **Warranty**

RapidPatch is covered by and subject to the terms and conditions of Dryvit limited materials warranty applicable to the Dryvit system used. Dryvit makes no other warranties expressed or implied. Contact Dryvit for full details.

#### **Technical and Field Service**

Available on request.