Introduction

Promat have discontinued the manufacture of Promat MANDOLITE® 550 but recognise the potential need for ongoing repairs of this material and so recommend that such repairs are executed by the use of Promat FENDOLITE® TG or Promat FENDOLITE® MII. Promat FENDOLITE® MII is certified by Lloyd's Register for use on structural steel members exposed to hydrocarbon pool or jet fire conditions although this certification does not extend to use on divisions such as steel bulkheads or decks. Promat FENDOLITE® TG is the hand applied Trowel Grade repair material suitable for use and compatible with Promat FENDOLITE® MII, although this material is not specifically included in the Lloyd's certification.

Promat FENDOLITE® TG and Promat FENDOLITE® MII are compatible with Promat MANDOLITE® 550 although they are slightly higher in density at 675kg/m³ and 775kg/m³ respectively as opposed to Promat MANDOLITE® 550 at 550kg/m³.

Manufacture of PROMAT® KC110 was also discontinued (since this material was only used with Promat MANDOLITE® 550) and so where repairs are required and the substrate is exposed and / or re-primed and painted, PROMAT® PSK 101 must be used as the flexible keycoat.

Note that Promat FENDOLITE® TG must be applied directly from the mixer by use of conventional plasterer's hand tools and cannot be spray applied, whilst Promat FENDOLITE® MII must be spray applied. If Promat FENDOLITE® MII is first mixed for 3 minutes in suitable approved mixer/pump equipment (such as a Putzmeister SP11) and passed through a spray head into a suitable container it may then be applied using conventional plasterer's hand tools.

Substrate not exposed

If the steel substrate has not been exposed, the following procedure shall be followed.

1. Remove all loose / damaged areas of Promat MANDOLITE® 550 and mesh leaving only sound material and mesh – extend the patch to allow a minimum 50mm overlap / connection to the retained mesh reinforcement and chamfer / angle the edge of the patch ie do not have "straight" vertical or horizontal junctions.
2. Attach a new piece of Promat® Plastic Coated Galvanised Mesh to the remaining sound existing mesh allowing a minimum overlap of 50mm and twist cut ends together at 150 – 200mm centres.
3. Pull mesh away from existing substrate so that it is located in the mid third of the freshly applied layer and ensure that no more than 3 layers of mesh overlap at any point.
4. Thoroughly wet the existing Promat MANDOLITE® 550 with potable water and allow to soak in.

5. Spray apply Promat FENDOLITE® MII or trowel apply Promat FENDOLITE® TG through the mesh and allow some overlap onto existing surfaces. Do not over-trowel either material as this may induce cracking of the repair.
6. Ensure that exposed top surfaces are sloped to reject water and that grooves approximately 10mm deep x 10mm wide are cut to receive Geocel 201 polysulphide mastic seals where appropriate.
7. When the repair is dry and its moisture content is low enough to allow painting, apply a suitable top coat paint system such as an epoxy primer coat plus a polyurethane finish coat.
8. After the application and curing of the top coat paint system, apply a suitable polyurethane or polysulphide mastic sealant at terminations.

Substrate exposed

If accidental or deliberate damage has resulted in substrate exposure, it is likely that local repair / reinstatement of the steel priming system will be required. This is beyond the scope of this EIDS and must be addressed and rectified by the platform/site maintenance personnel. Once the substrate is in a fit condition to accept a repair, the following procedure shall be followed.

1. PROMAT® Helical CD Weld Pins must be attached to the substrate at maximum 400mm centres in a staggered or diamond pitch. Since this will require local removal of the newly re-applied paint system this may be undertaken before application of the primer OR if undertaken after primer application will require local “touch up” at weld sites.
   NOTE: If “hot works” are not permitted, we understand that Hilti have a suitable tool (DX450) for which Lloyd’s have issued an approval for offshore use and we therefore suggest that contact is made directly with Hilti.
2. Once the priming system is dry, cured and solvent released, apply a coat of PROMAT® PSK 101 at a wet film thickness of 100-150 microns (55-82 microns DFT) and allow to dry and cure.
3. Attach PROMAT® Plastic Coated Galvanised Mesh to previously fixed PROMAT® Helical CD Weld Pins ensuring a minimum 50mm overlap at all joins which shall be secured by twisting cut ends of mesh together at 150 - 200mm centres.
4. Ensure that no more than 3 layers of mesh overlap at any one point and that the mesh will be substantially in the mid third of the reinstated thickness by pulling it away from the substrate as and where required.
5. Thoroughly wet the edges of the remaining Promat MANDOLITE® 550 with potable water and allow to soak in.
6. Spray apply Promat FENDOLITE® MII or trowel apply Promat FENDOLITE® TG through the mesh and build to the required thickness in the minimum number of coats, ensuring that any exposed top surfaces are sloped to reject water.

7. When the repair has set, cut a groove approximately 10mm deep x 10mm wide to receive Geocel 201 polysulphide mastic seal at steel / Promat FENDOLITE® MII or Promat FENDOLITE® TG junctions.
8. When the repair is dry and its moisture content is low enough to allow painting, apply a suitable top coat paint system such as an epoxy primer coat plus a polyurethane finish coat.
9. After the application and curing of the top coat paint system, apply a suitable polyurethane or polysulphide mastic sealant at terminations.

These recommendations shall be read in conjunction with the latest Promat FENDOLITE® MII & Promat FENDOLITE® TG Energy Industries Application Manual.

The information given in this Application Procedure is based on practical experience, independent and other tests and represents, in Promat's opinion, the best technical advice available. Since the products are applied under circumstances beyond our control, Promat can accept no direct or consequential liability, whether in contract or in tort, for the interpretation of such recommendations and reserves the right to modify the recommendations as necessary. Should it be unclear as to the meaning of any of the instructions given above, or if further information is required, please consult Promat.