

PERSONAL SAFETY

- Comfort Particle Mask P2
- Hearing Protection
- Comfort Goggles
- Reusable Workwear
- Safety Gloves

1 Sanding down the job area



- ▶ Sand down the area to be repaired to the bare metal substrate
 - ▶ To remove coatings quicker, use the ROTEX motion setting
 - ▶ To refine previous sanding scratches, switch to ROTEX orbital random motion, keeping the previous abrasive disc on the machine
- Note: For aluminium substrates and workplaces, always use a pneumatic sanding tool such as Festool Automotive Systems LEX 3 150/7 and follow instructions of ATEX directive 94/9/EG for Zone 22 areas



3M™ Hookit™ Cubitron™ II 80+ - 120+ - 125mm



Festool RO 125



3M™ Hookit™ Cubitron™ II 80+ - 120+ - 150mm



Festool LEX 3 150/7

2 Cleaning of the surface



- ▶ Degrease the surface



3M™ General Purpose Adhesive Cleaner



3M™ Professional Panel Wipes

3 Calibration of a new cartridge



- ▶ Insert the cartridge into a suitable application gun
 - ▶ Before attaching the mixer to the cartridge, equalize cartridge by squeezing out a small amount of material until both components are equally extruded
 - ▶ Attach the mixing nozzle and discard the first 2-4 cm of extruded material, to remove any improperly mixed material
- Note: The previous step is only necessary when using a new cartridge.



3M™ FC Epoxy Metal Filler



3M™ Static Mixing Nozzle



3M™ High Power Manual Gun

3 Application



- ▶ First apply a "tight" coat of material onto the welded area, in order to ensure that the material completely covers any pinholes from the previous welding steps. Additional layers of the product can be applied immediately onto the first layer in a "wet on wet" process, in order to build up the repair to the required level
- ▶ Working time and mixing nozzle open time 15 -20 min @ 22 °C
- ▶ Recommended settings for applicators: pneumatic max. inlet pressure 5.5 bar / battery driven 3kN, max speed 180mm/min



3M™ Plastic Spreader

4 Drying



- ▶ The curing of 3M™ FC Epoxy Metal Filler can be accelerated using IR drying after the initial gelling period. Wait 10 minutes before using an IR dryer to heat for 10-20 minutes with a panel temperature of 70 °C
 - ▶ Airdrying: sandable ~ after 4h @ 22 °C ambient temperatures
- Tip for use: warming up the material & surface to ~30°C before material application will help to accelerate curing, particularly at cold ambient temperatures

5 Pre-Sanding of the filler area



- ▶ Pre-sanding step can also be done by using traditional body files

6 Sanding of the filler area



- ▶ Flat sanding of the filler area
- ▶ To remove coatings quicker, use the ROTEX motion setting
- ▶ To refine previous sanding scratches, switch to ROTEX orbital random motion, keeping the previous abrasive disc on the machine



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Festool LEX 3 150/7

7 Cleaning of the surface



- ▶ Thoroughly degrease the surface



3M™ General Purpose Adhesive Cleaner



3M™ Professional Panel Wipes

Optional - second layer application



- ▶ Apply a further layer of 3M™ FC Epoxy Metal Filler if necessary and repeat drying and sanding steps as recommended in the previous steps
- ▶ Maximum finished thickness should not exceed 4-6 mm, maximum layer thickness should not exceed 2-3 mm
- ▶ Follow car manufacturer and paint company recommendations for subsequent steps



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