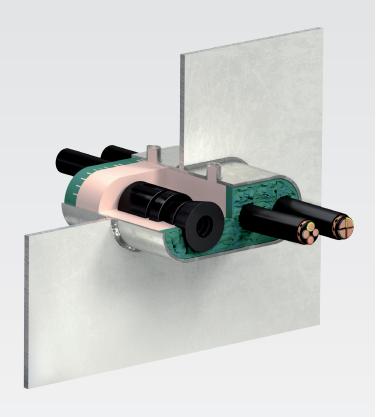


Fire resistance class A-60 in accordance with IMO-Resolution A.754(18) for bulkhead and deck penetration. Sealing length 180 mm.



| System components | GEAQUELLO® E 950 Sealing compound | 3.0 kg pail – Art.-Nr. 4145486 | 15.0 kg pail – Art.-Nr. 4145524 | | GEAQUELLO® R 312 / R 380 Retaining modules | 360 modules à 120 x 25 x 6 mm – Art.-Nr. 4148143 | 25 modules à 800 x 25 x 6 mm – Art.-Nr. 4148142 | | GEAQUELLO® E 824 Impregnation fluid | Bottle à 1 kg – Art.-Nr. 4145152 | Canister à 10 kg – Art.-Nr. 4145286 | | GEAQUELLO® E 234 Retrofit modules | Ø 40 x 235 mm – Art.-Nr. 4145500 | Ø 66 x 235 mm – Art.-Nr. 4145502 | Ø 90 x 235 mm – Art.-Nr. 4145504



General information

Fields of application

The GEAQUELLO® E 950 sealing system is developed for the application in ship-building. In case of a fire the system is a safe sealing for cables and pipes, also above and under the water line.

System properties

- Removable
- Fire retardant, gas- and watertight (in accordance with SOLAS / IMO)
- Sealing length 180 mm
- Easy application no adapters, moulded components or subdivers are required for installation, in spite of varying cable and pipe diameters
- All components react neutrally, are physiologically safe and are not subject to hazard identification requirements
- For retrofitting, the sealing compound can be removed on every time
- Easy cable and pipe retrofitting with GEAQUELLO® E 234 retrofit modules
- Indoor and outdoor application
- EMC / EMI penetration system in combination with FLAMMADUR® E 711 highly conductive sealing compound

FLAMMADUR® E 292 T Cartridge à 345 ml – Art.-Nr. 4146603 Bucket à 1kg – Art.-Nr. 4146219 FLAMMADUR® A 365 Strip 5 Stck. à 1000 x 100 x 3 mm – Art.-Nr: 4246488 FLAMMADUR® E 292 Top sealing compound Can à 1 kg – Art.-Nr: 4125671 Can à 5 kg – Art.-Nr: 4172744 FLAMMADUR® A 386 Top sealing compound Can à 1 kg – Art.-Nr: 4146315 GEAQUELLO® E 234 T Two-component putty Cartridge à 150 ml – Art.-Nr: 4145510 Cartridge à 345 ml – Art.-Nr: 4145512

GEAQUELLO® **E 950** Sealing system

Application instructions

- 1. To build the end wall, roughly fit the retaining modules GEAQUELLO® R 312 and / or R 380.
 - The retaining modules shall be fitted in such a way that the "comb-site" will be sealed.
 - The expansion modules can be shortened in their length with simple tools.
 - All cables / pipes must be seperated from eachother with the help of retaining modules. This ensures the minimum distances and that the installations get full covered in the sealing.
- 2. The retaining modules shall be impregnated with GEAQUELLO® E 824.

For 5 retaining modules R 380, 1 kg of impregnation liquid are needed.

- · Gloves and eye protection shall be used while working.
- · Cover the work place with paper or foil.
- The modules absorb the liquid and swell to up to 10 times the size.
- Within a few minutes, a stable and pour-proof front wall is formed, which is fire-retardant and self-extinguishing.
- 3. Mixing of the sealing compound GEAQUELLO® E 950 with powder and tap water.

The required quantity depends of the penetration size and diameter of the installations.

- Mix the GEAQUELLO® E 950 powder into clean water with mixing ratio of 2:1 (Powder: Water).
- The sealing compound must be free of lumps and bubbles.
- Let the mixed sealing compound rest for approx. 5 minutes.
- Mix again shortly before filling the opening.
- **4.** Sealing the penetration
 - Filling the penetration e.g. with the help of a pump or funnel.
 - Pay attention of shrinkage. In case of shrinkage re-fill the penetration.
- **5.** If plastic pipes up to Ø 100 mm are used, wrap one layer of FLAMMADUR® A 365 strips around each of them and fix the strip with cable ties, adhesive tape or similar. Wrap two layers of FLAMMADUR® A 365 strips around plastic pipes > Ø 100 mm.
 - For bulkhead penetration: Place the wrap in the middle of the pipe. For deck penetration: Place the wrap approx. 2 cm above the front wall.
 - The wrap can be cut to the required length.

(6. For outdoor-penetration cover with approx. 20 mm FLAMMADUR® E 292, FLAMMADUR® E 292 T or FLAMMADUR® A 386.)



- Green = GEAQUELLO® R 312 / R 380 Retaining modules
- Pink = GEAQUELLO® E 950 Sealing compound

 Black = GEAQUELLO® E 234 Retrofit modules
- Black wrap around white pipe = FLAMMADUR® A 365 Strips for flammable pipes
- Brown = FLAMMADUR® E 292, FLAMMADUR® E 292 T or FLAMMADUR® A 386 top sealing compounds