FREEZER AND COOLER INSTALLATIONS

Freezer and cooler installations present special considerations for facility owners, facility designers and material installers. Here is what you need to know about the appropriate Metzger/McGuire products and their installation:

Filler Recommendations for Various Cold Areas

Environment	Recommended Filler(s)
Freezer; -25°F (-32°C) to +32°F (0°C)	Spal-Pro RSF
Covertible Freezers; -25°F (-32°C) to +45°F (7°C)	Spal-Pro RSF
Cooler; +33°F (1°C) to +55°F (13°C)	Spal-Pro RSF or MM-80

Product Descriptions and Information

For Freezers and Coolers

Spal-Pro RSF is a rapid-setting polyurea with a heavy duty, high durometer reading of A92-94 (@0˚F). The major advantage of Spal-Pro RSF offers is a quick traffic-ready time. At 0°F (-18°C) Spal-Pro RSF can be ready for light traffic in 2 hours and full, heavy traffic within 3 hours. Access times get shorter as temperature increases. Spal-Pro RSF must be dispensed with a meter mix, dual dispense pump due to it rapid gel time (approx. 3 mins). Pump should be modified (heated and insulated) for use in freezers with the goal of keeping material temperature stabilized at 75˚F (24˚C)+. For repairs and small to medium sized applications, Spal-Pro RSF is available in pre-packaged 750:750 ML dual-cartridge convenience kits. Cartridges should be kept outside freezer until just prior to use or kept warm in heating box.

For Coolers Only

MM-80 Semi-Rigid Epoxy is our "industry standard" filler for heavy duty floor situations. Its longer potlife (15-30 mins at 65˚F [18˚C]) allows it to be dispensed with bulk-type caulking guns or meter-mix dispensed, or it can simply be poured from the mixing container. Its longer potlife means it takes longer to cure traffic-ready than the Spal-Pro RSF. At 35˚F (2˚C) to 55˚F (13˚C) you should allow 6-8 hours for initial cure and 12-24 hours for full, heavy duty traffic.

When to Install MM-80 and Spal-Pro RSF

The best procedure for installing any joint filler in a freezer/cooler environment can be decided by merely understanding the basic characteristics of concrete. Simply put, concrete expands when subjected to warmer temperatures and contracts when exposed to cooler temperatures. Therefore, when concrete is at room temperature, the joints will be at their narrowest due to concrete expansion. When the environment is brought down to cooler temperature, the concrete will lose moisture, contract, and the joints will open to their widest point. If a filler is installed at room temperature and then brought down to its ultimate operating temperature, the concrete will contract, the joints will open, and the filler will likely yield to allow for movement. If the joint opening is minimal, refilling of the separation voids would be necessary (refer to T-5). If the joint opening is severe enough, the joint filler would be rendered useless and reinstallation necessary.

The best method for avoiding problems in a freezer cooler environment is to install after concrete has been placed a minimum of 30 days and after the environment has reached its ultimate operating temperature for 5-7 days. The advantage to this method is that the joints are likely to have opened to their ultimate width and no follow up maintenance is generally required.