

KMK Compensators Ltd.

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GENERAL:- STORAGE, HANDLING & INSTALLATION, OPERATING & MAINTENANCE INSTRUCTIONS

1) STORAGE

The storage environment and storage time can be important factors in the condition and performance of a fabric expansion joint. The materials used in fabric expansion joints exhibit resistance to various forms of environmental attack; however, recommended storage practices must be observed and an awareness of deviations must be maintained. In cases of storage abuse, expansion joint warranties may be invalid.

Indoor Storage Recommendations

- Store the expansion joints in their original shipping state.
- Protect the expansion joints from physical damage, and or, abuse.
- Store in cool, dry areas.
- Do not store where the temperature will exceed 65 °C. The ideal storage temperature is between 10° to 20°C. Expansion joints should not be stored near sources of heat such as radiators and base board heaters.

Outdoor Storage Recommendations

- Store the expansion joints in their original shipping containers.
- Protect the containers from physical damage and abuse.
- Store at least 30 cms above the ground in a dry area where flooding will not occur.
- Cover the containers with a tarpaulin or heavy plastic to protect them from the weather.
- Do not store where the temperature will exceed 65°C. The ideal storage temperature is between 10° and 20°C. Expansion joints should not be stored near sources of heat.

2) HANDLING AND INSTALLATION

Expansion joints should arrive at the job site in good condition. The purchaser should, immediately upon receipt at the job site verify that all parts shown on the packing slip have been undamaged. To ensure proper performance and service life it is important to prevent damage by careful handling and by supporting the expansion joint during installation.

Pre-Erection Requirements:-

The breach opening and ducting should be checked for proper alignment and that tolerances are within those specified on the relevant drawings. If the breach opening exceeds these tolerances then the expansion joint manufacturer must be notified. Mounting flanges or expansion joint attachment area of the ductwork must be smooth, clean, flat and parallel. All welded areas must be ground smooth at attachment points. The area around the ductwork must be cleared of any sharp objects and protrusions. If not removable they should be marked for avoidance.

The expansion joint and components should be kept packaged until immediately before installation. If any handling devices such as crane hooks or fork lifts are utilised in handling the expansion joints, the contact surface must be protected by cushioning materials. If welding or burning operations are being performed in the vicinity of the exposed expansion joints, fabric welding blankets or other protective covering must be used. These covers must be removed before system start-up.

Expansion joints supplied factory assembled on metal frames will be shipped with either static transit brackets or screwed rod transit brackets (this type allows for minor breach adjustment to be made if necessary when connecting to duct ends).

NOTE: TRANSIT BRACKETS MUST BE REMOVED **AFTER** INSTALLATION OF THE UNIT AND **PRIOR** TO PROCESS START-UP.

Installation:-

Never extend, compress, or laterally distort expansion joints to compensate for fabrication dimensional errors without the approval of KMK Compensators Ltd.

Expansion joints provided with baffles or liners should have flow arrows or other suitable means of assisting the installer to properly orient the expansion joint to flow direction. Do not install insulation over the expansion joint or mounting area unless this is specifically detailed by KMK Compensators Ltd. In areas where coal dust can collect on the expansion joint outer cover, protective shields may be required. Coal dust can cause spontaneous combustion, resulting in burning outer covers of expansion joints. Consult the expansion joint manufacturer for details and requirements for a shield. Proper installation of the expansion joint is critical to the service of the product and should be checked by the installer.

When expansion joints have been installed by persons other than KMK Compensators Ltd. approved installers, KMK Compensators Ltd. would prefer, where ever practical, to carry out a final inspection prior to start-up.

NOTE: Prior to start up actual installed width dimensions of the expansion joints at all corners on rectangular / square, and N,S,E,W on circular, should be measured and logged along with any flange misalignment or offset, this information should be reported back to KMK Compensators Ltd.

When the plant has been operational for at least 4 months the above measurements should be taken again whilst the unit is under full load, this information should also be conveyed back to KMK Compensators Ltd.

3) OPERATING AND MAINTENANCE CONDITIONS

Generally KMK expansion joints are maintenance free, as there are no serviceable parts. To aid maximum life expectancy of KMK expansion joints, we recommend the following inspection and maintenance procedures.

1. The expansion joints must not be lagged over or covered when in operation, i.e. air circulating around the fabric expansion joints must not be restricted.

2. All bolting should be checked for tightness 2 to 3 days after initial start up and re-tightened if necessary. The bolts should then be checked on a monthly basis.

3. During shutdown periods, expansion joints should be shielded / protected from weld splatter, metal cutting debris and falling objects etc. If protective shields or blankets are used in shutdown periods these must be removed prior to start up.