

Storage Expansion Joints

» Storage in general

In the majority of products based on vulcanized rubber, storage for a certain period inevitably induces changes in the physical properties of the stored products.

Consequently, these products may not have their ultimate performance characteristics if stored for a length of time before installation (for example, an excess hardness, softening of the rubber or cracks and other surface deteriorations). These changes may result from one particular factor or from a combination of factors, namely the effect of oxygen, ozone, light, heat and humidity.

The adverse effects of these factors may be minimized by a careful choice of the storage conditions.

PROTECTIVE MEASURES

» Storage area requirements

Cool

Optimum temperature is 10° C. It must not drop below 0° C nor exceed + 30° C.

However, should the temperature fall below 0° C, simply take the precaution of warm up the joint slowly before handling them in order to avoid any risk of damage.

Relatively dry

Maintain a relative humidity between 45 and 70% as excessive dryness is harmful for the expansion joint.

Temporary deviations are however allowed. For the counter-flanges (or metal parts) excessive dryness or humidity are harmful and the pieces must be protected.

Light ventilation

Ventilation shall be as light as possible, avoiding any draughts.

Heating

Stoves, radiators and steam pipes should be insulated.

If this is not possible, the expansion joint must be stored a good distance from these heat sources.

Lightning

During storage, the expansion joints must not be exposed to sunlight or any other light source rich in ultraviolet radiation.

Cleanliness

It is advisable to clean the room thoroughly before storing expansion joints.

Oil, greases and chemicals must not be stored in the same room or should at least be kept separate from the expansion joints.

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OUR EXPANSION JOINTS

» Storage precautions

- ✦ To prevent deterioration of our expansion joints, we recommend storing them away from ozone generating sources.
- ✦ It is advisable to store them in such a way that they have no contact with the ground.
- ✦ Our expansion joints must be laid flat, on a plain surface to prevent any deformation.
- ✦ Avoid contact with any sharp object. Under the above optimum conditions, the expansion joints may be stored for a maximum period of two years from end of manufacture. Expansion joint supplied in a packing case may be stored flat in their original packing in a warehouse for the same period of two years.
- ✦ Where longer storage is scheduled, it is essential to protect the rubber portions of the expansion joints by giving them two coats in alternate directions of special CSM (hypalon based) paint, at works. This is for spares which have been given this treatment may be stored for a maximum total period of 5 years under the above conditions. (The first two years, they may be stored in their packing case as for non-treated expansion joints).

Note: Metal parts such as tie rods and bolts are be stored in their original packing.

As applicable, give them treatment for normal conditions of storage of metal parts, suitable for the storage area.

For interim storage during construction work when no proper user facilities are yet available.

This storage, which will last no more than a few months, must comply with the following requirement:

- ✦ Lay the expansion joint flat on a plain surface covered with wood and a fabric or plastic protective covering.
- ✦ Store in a dry place (protected against rain, surface water and splashing).
- ✦ Cover the expansion joints to protect them from bad weather and sunlight, (light coloured fabric or plastic if storage area is exposed to sunlight).
- ✦ Provide natural ventilation (but avoid draughts and air movements).
- ✦ Take necessary precautions to avoid contact, even accidental, with chemicals, oil, grease, etc.
- ✦ Store away from sources of heat or ozone.
- ✦ Shield against malicious mischief.
- ✦ There are no reservations as to ambient storage temperatures providing they exceed 0 °C.
- ✦ Where ever possible, store in the shade of a building.
- ✦ Position so that the identification marking is visible without any items having to be moved.



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» Checking

After tightening, make sure the tie-rod play values (if any) are all identical so that reaction will be evenly distributed between each tie-rod.

MAINTENANCE AFTER INSTALLATION

» Prior to starting up

Remove any dust or foreign bodies which may have found their way inside the expansion joints. Make sure there is no possibility of accidental damage or sabotage. It is advisable to cover the expansion joints with light metal sheeting. Check that no lubricant can fall onto the expansion joints.

» When starting up

Check for leakage.
If necessary, check efficiency of tie-rods.

» When running

The expansion joints must be easily accessible and never covered with insulating material or paint. They may only be protected with our fire-resistant covers, where these are specified. As soon as the expansion joints are working, make sure they are not subjected to movements exceeding their allowable limits.

» Maintenance

It is advisable to inspect the expansion joints every **12 months**.

- Any changes in outer cover will be indicative of serious deterioration.
- Make sure the bolts are properly tightened.
- Check the extent of expansion joint movements, which must remain within their allowable limits.

It is advisable to make an in-depth inspection of expansion joints at least every 5 years.

Check each expansion joint carefully. For this, it must either be easily accessible for internal inspection or must be dismantled.