

## **PART 5 -SPECIAL REQUIREMENTS**

The BSF connection is also capable of accommodating various special project requirements. The following is a partial list of solutions that can be utilized.

### **FILLING JOINTS FOR FIRE PROTECTION**

The joints between the columns and beams are normally filled so that the BSF connections have protection and will not be in the critical component when considering fire protection ratings. Various materials may be used to fill the joints between the beams and columns:

When allowance is made for movement in joints, use self-expanding fire-resistant foam or mineral wool.

Most commonly used is a quick setting grout. For damming of the mortar, round rubber/plastic backing is needed, such as TREMCO joint backing, obtainable in diameters from 3/8 to 2 inches (10 to 50 mm).

A joint-backing of suitable diameter is placed along the outer rim of the concrete-joint between the beam-end and the column (Example: with 5/8-inch (15 mm) opening, a 13/16-inch (20 mm) joint-backing is suitable.) A suitable pre-mixed dry mortar is mixed and poured into the joint (Fig. 1). After curing of the mortar, the joint-backing is pulled out leaving a 5/8-inch to 3/4-inch (15-20 mm) deep recess.

To improve the joint appearance, elastomeric joint-sealant may be used as a finish.

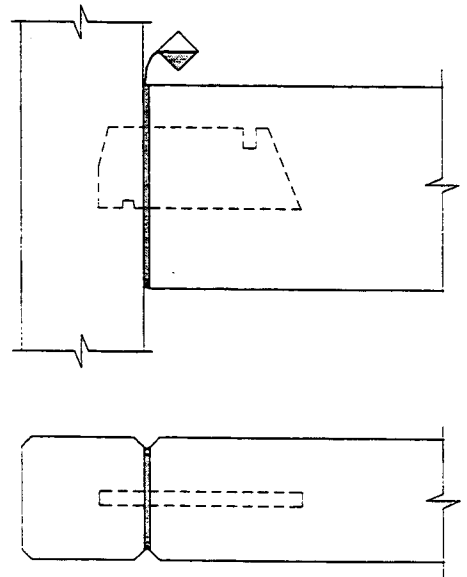


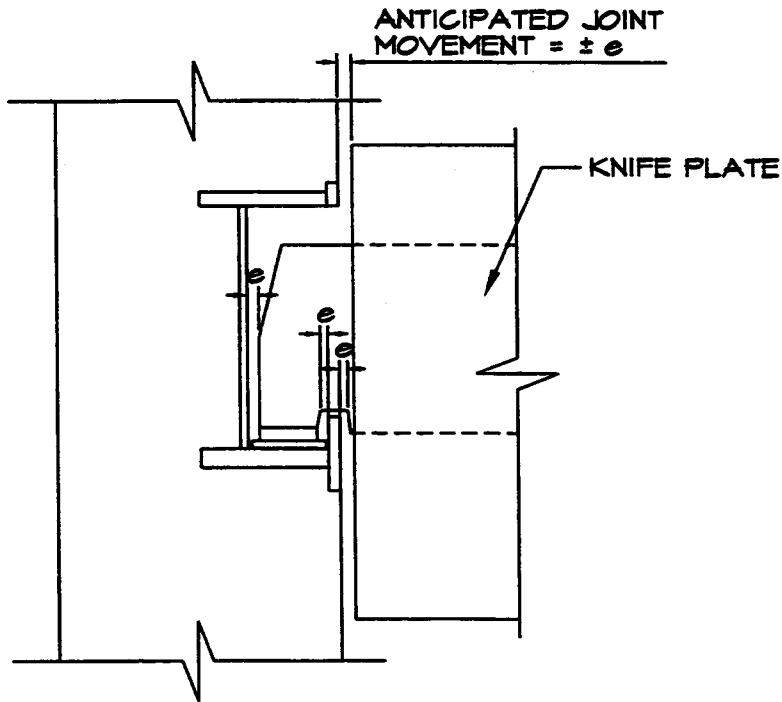
Fig. 1

NOTE: Knife blade can be zinc coated for corrosion protection and elastomeric joint sealant used to waterproof the joint.

## EXPANSION JOINTS

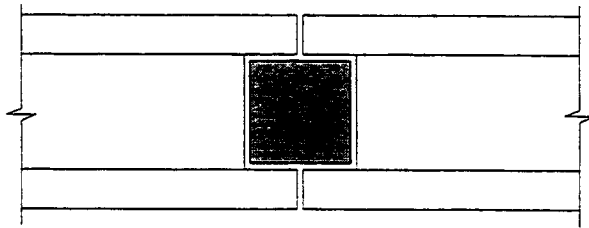
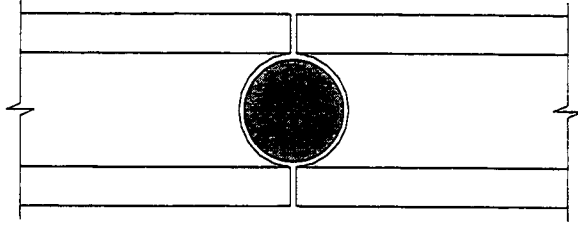
Special deeper column box units with special support:

2 steel plates separated by a sliding plate to be inserted in the column box as support for the knife.

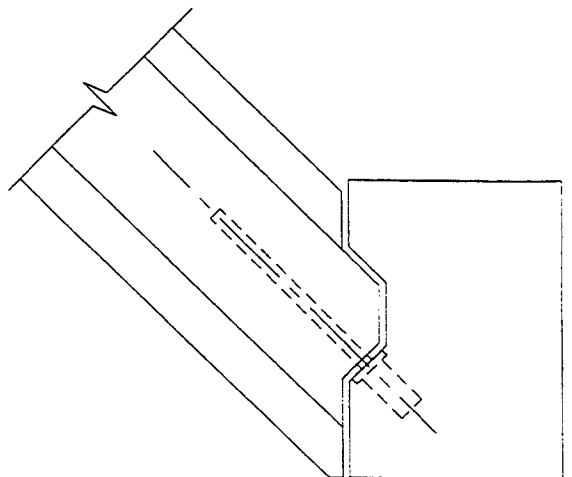
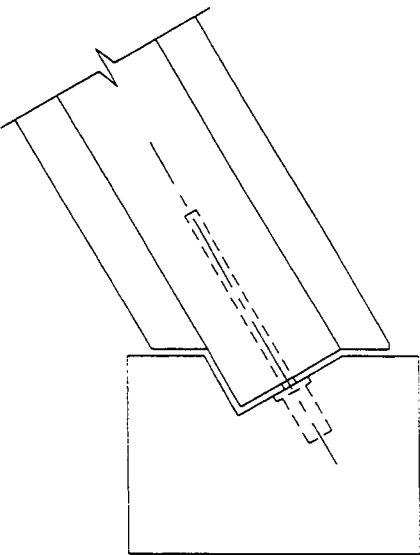


NOTE: Joint can be filled with a firesafe rock-wool and sealed with fire-resisting sealant and zinc coated for corrosion protection.

# SPECIAL FRAMING FEATURES



## INVERTED TEE BEAM AROUND COLUMN



## SKEWED CONNECTIONS