Balco Inc.
Design No. BA/EJH 120-02
Formerly CEJ 521F
Fire Rated Joint System
MetaFlex® 2000
UL 2079, ASTM E1966
Rating: 2 Hour
Cycling – Type IV

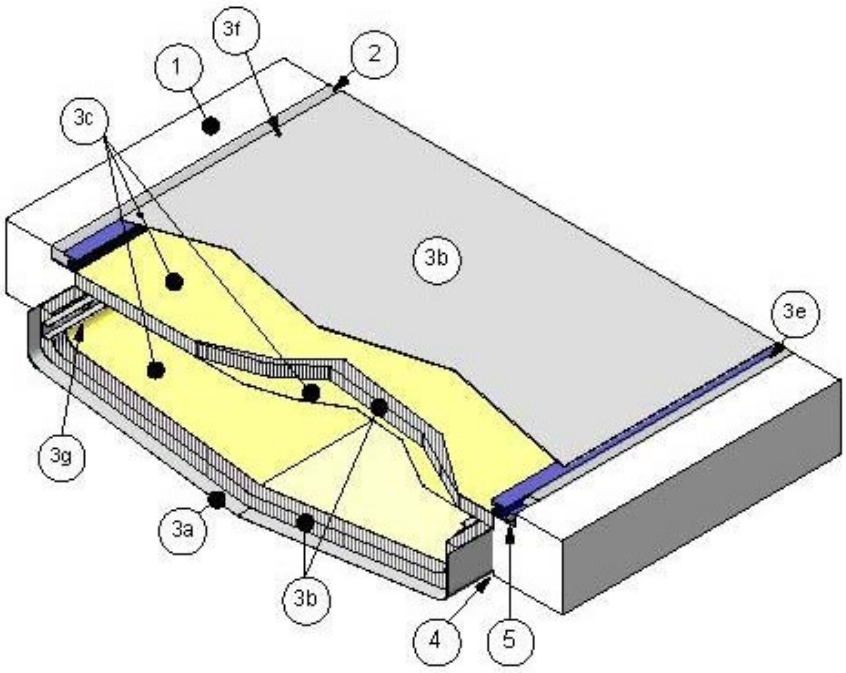

Figure 1. MetaFlex® 2000

1. **CONCRETE FLOOR ASSEMBLY:** Two hour rated concrete floor assembly made from either lightweight or normal weight concrete with a density of 100-150 pcf, with a min. thickness of 4-1/2 in. at the joint face. Overall slab thickness may vary to accommodate various blockout depths (longitudinal recesses) formed in the concrete, to house the architectural cover plate. The blockout width may also vary without restriction. When blockouts are used, fill them with Blockout Filler Material (Item 2).

2. **BLOCKOUT FILLER MATERIAL:** Fill the blockout with either grout, cement or concrete in accordance with the manufacturer's recommendations and instructions.

3. **JOINT TREATMENT:**

   Certified Product: Balco Inc., MetaFlex® 2000, Models 2HFFB-14 through 2HFFB-36

   The joint treatment is composed of mechanical components attached to the existing field construction. Two barriers and a cover plate are required as shown. Fasteners (Item 5) secure the joint treatment to the concrete deck. Maximum joint width is 36 in. (nominal

joint width 18 in.) and manufacturer's designation is 2HFFB-36. Manufacturer's designations less than the maximum joint width are also acceptable. Design tested and illustrated at maximum joint width. Nominal joint width illustration (installed configuration) may differ

A. METALLIC SHEET: Fiber insulation blanket encapsulated on exposed sides with min. 0.002 in. metallic sheets.

B. FIBER INSULATION BLANKET: For maximum joint width of 36 in. use min. 2 in. thick material for (top) and 1-1/2 in. thick material (bottom). Lesser thickness may be used for narrower maximum joint widths.

C. HIGH TEMPERATURE FABRIC: Fiber insulation blanket encapsulated on unexposed sides with min. 0.030 in. high temperature fabric sheets.

D. COVER PLATE: Use a min. 20 GA galvanized steel plate or a min. 1/8 in. aluminum plate.

E. FRAMES: Use extruded aluminum frames as provided by the manufacturer with a depth of not less than 1 in.

F. COVER FASTENERS: Use screws to secure cover plate (Item 3D) to frame (Item 3E) on one side only to allow free movement on opposite side.

G. TACK STRIP: Use continuous 1 x 1/2 x 1/2 in. 20 GA steel channel with holes drilled 12 in. on center (oc) to accommodate fasteners (Item 5).

H. As an alternate to items 3D, 3E, and 3F, the manufacturer may furnish an aluminum architectural joint system provided that the minimum cover plate thickness is 1/8 in. thick and that the minimum frame depth is 1 in.

I. Joint treatment shall be installed in accordance with Listed Manufacturer's installation instructions.

4. CAULK: Apply min. 1/4 in. beads of Rectorseal Metacaulk® MC150+ to both interior corners of joint treatment (Item 3).

5. FASTENERS: Use min. 1/4 in. x 2 in. long concrete masonry screws spaced at max. 12 in. oc used to secure top barrier of joint treatment (Item 3) to the concrete floor assembly (Item 1) and to secure bottom barrier using the tack strip (Item 3G) to both joint facers.

Consult the listing report on the Directory of Building Products (https://bpdirectory.intertek.com) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.