



Fire Protection Products



BROADCAST NO. 3004
3M Fire Protection Products

Date: June 1, 2000
Issued By: Brandon Cordts

TITLE: TOTAL MOVEMENT VERSUS EXTENSION/COMPRESSION OF CONSTRUCTION JOINTS AND PERIMETER JOINTS

DESCRIPTION: The amount of movement that a dynamic joint is tested for is sometimes misinterpreted by installers, building officials, specifiers, and architects. A typical Underwriters Laboratory (UL) head-of-wall test will list the nominal joint width and percent compression and/or extension. If the system says “nominal joint width of 1" and 25% compression or extension,” then at the start of the test the joint is 1" wide and is:

- ✓ extended 25% so the joint width becomes 1.25" and
- ✓ compressed 25% so the joint width becomes .75" and
- ✓ fire tested in the extended state.

Remember, a manufacturer can list a system with “compression only,” “extension only,” or as in the example above “extension and compression.” In the example above, if the system said “compression only,” then that system was compressed 25% down to .75” and fire tested at the nominal joint width. In the example above, if the system said “extension only,” then that system was extended 25% out to 1.25” and fire tested in the extended state.

Just as with UL, Omega Point Laboratory lists joints for compression only ("-"), for extension ("+") only, or for extension and compression ("±")

The definitions and the way the testing agencies list their systems are fairly straightforward. **The confusion arises with the way manufacturers market the capabilities of their joint systems.** Some manufacturers list their system as “Total movement,” which is the addition of the compression and extension, and is often misinterpreted. In the above example, the manufacturer may choose to have the system listed as “50% Total movement.” The problem with using total movement is that the contractor, specifier, or code official does not know how much movement the system is designed for in extension or compression. Some manufacturers chose to run compression only or a certain % extension and different % compression.

3M list their systems as “x % compression and x % extension.” Don’t get confused into thinking that a manufacturer’s system may have greater movement simply because it lists “x % total movement.” Be sure to point this out to code officials, specifiers, contractors, and anyone else that needs to know.

THIS BROADCAST IS BEING SENT TO:

- 3M Fire Protection Products Authorized Distributors
- 3M Fire Protection Products Authorized Direct Dealers
- 3M Sales Representatives
- 3M Manufacturer’s Representatives
- 3M St. Paul Internal