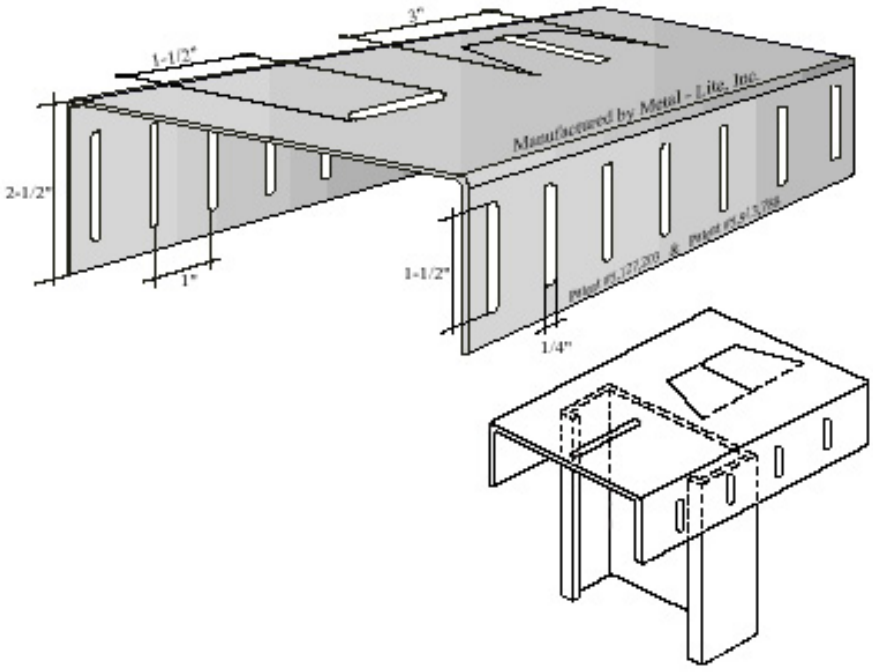
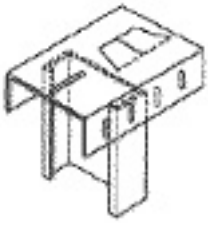
The System



The First Deflection/Seismic and Fire-Resistant Wall System and Method to Pass the Cycling, Fire Resistance and Hose Stream Tests As Required by The 1999 BOCA Code, The 1997 UBC Code, The 1997 STANDARD Code and The INTERNATIONAL BUILDING Code, 2000



"THE SYSTEM"™ is a patented wall structure and that cycles and is fire resistant. This single-track system provides a fast and economical approach to head-of-wall installation providing a positive attachment (secure installation). *No cut-ins, no caulking, no spray-on fireproofing, or no elastomeric coating needed.*

This is the first head-of-wall system and method to meet the cycle, fire resistance, and hose stream testing requirements of the BOCA Code Section 709, the Standard Code Section 705, the UBC Section 702 and 706, and the International Building Code, 2000.

"The System™" by Metal Lite, Inc., was tested to comply with the following excerpts from the 1996 B.O.C.A. Code:

The **FIRE-RESISTIVE JOINT SYSTEM**, in section 706.2, is an assemblage of specific materials or products that are designed, tested, and fire-resistance rated in accordance with ASTM E119 to resist, for a prescribed period of time, the spread of fire through joints made in or between fire-resistance rated assemblies.

709.7.1 Fireresistive joint systems: Fireresistive joint systems shall be tested in accordance with ASTM E119 listed in chapter 35 under the following conditions:

5. Joint systems shall be tested at the maximum joint width for which they are designed. Joint systems designed to accommondate movement shall be expanded to the maximum joint opening width for which they are intended to function.

7. Joint systems designed to accommodate movement shall be preconditioned by cycling between the minimum and the maximum joint opening width for which they are intended to function for the number of cycled specified in table 709.7.

Table 709.7

PRECONDITIONING CYCLES FOR FIRE RESISTANT JOINT SYSTEMS

Type of Joint System	Number of Cycles
Expansion/Contraction	500
Seismic	100
Wind Sway	500

The First Deflection/Seismic and Fire-Resistant Wall System and Method to Pass the Cycling, Fire and Hose Stream Test Required by The 1997 STANDARD MODEL BUILDING Code.

"The System"™ by **Metal-Lite, Inc.™**
was tested to comply with the following excerpts from the
1997 Standard Code:

705.7.2 Fire Test. Fire resistant joint systems shall be tested in accordance with ASTM E 119 under the following conditions:
5. *Joint* systems shall be tested at the maximum joint width for which they are designed. *Joint* systems designed to accommodate movements shall be expanded to the maximum joint opening width for which they are intended to function.
7. *Joint* systems designed to accommodate movement shall be preconditioned by cycling between the minimum and the maximum joint opening width for which they are intended to function for the number of cycles specified in Table 705.7 in accordance with ASTM E 1399.

Table 705.7	
PRECONDITIONING CYCLES	
Type of Joint System	**Number of Cycles**
Expansion/Contraction	**500**
Seismic	**100**
Wind Sway	**500**

The First Deflection/Seismic and Fire-Resistant Wall System and Method to Pass the Cycling, Fire and Hose Stream Test Required by the 1997 UNIFORM BUILDING Code.

The **FIRE-RESISTIVE JOINT SYSTEM**, in section 706.2, is an assemblage of specific materials or products that are designed, tested, and fire-resistance rated in accordance with UBC Standard 7.1 to resist, for a prescribed period of time, the passage of fire through joints.

Such material or construction assembly shall be securely installed in or on the joint for its entire length so as not to dislodge, loosen or otherwise impair its ability to resist the passage of fire and hot gases.

706.2 Fireresistive joint systems: *Fireresistive joint systems* shall be tested in accordance with U.B.C. Standard 7.1 under the following conditions:
5. *Joint* systems shall be tested at the maximum joint width for which they are designed. *Joint* systems designed to accommondate movement shall be expanded to the maximum *joint* opening width for which they are intended to function.
7. *Joint* systems designed to accommodate movement shall be preconditioned by cycling between the minimum and the maximum *joint* opening width for which they are intended to function for the number of cycled specified in table 7-D.

Table 7-D	
PRECONDITIONING CYCLES	
Type of Joint System	**Number of Cycles**
Expansion/Contraction	**500**
Seismic	**100**
Wind Sway	**500**

METAL-LITE INC

Excerpts from the International Building Code (IBC) 2000

FIRE-RESISTANT JOINT SYSTEM - An assemblage of specific materials or products that are designed, tested, and fire-resistance rated in accordance with UL 2079 to resist for a prescribed period of time the passage of fire through joints made in or between fire-resistance-rated assemblies.

712.1 General. Joints installed in or between in or between fire-resistance-rated walls, floor or floors/ceiling assemblies and roofs or roof/ceiling assemblies shall be protected by an approved fire-resistant joint system designed to resist the passage of fire for a time period not less than the required fire-resistance rating of the wall, floor or roof in or between which it is installed. Fire-resistant joint systems shall be tested in accordance with Section 712.3. The void created at the intersection of a floor/ceiling assembly and the an exterior curtain wall assembly shall be protected in accordance with Section 712.4.

712.2 Installation - Fire-resistant joint systems shall be securely installed in or on the joint for its entire length so as not to dislodge, loosen or otherwise impair its ability to accommodate expected building movements and to resist the passage of fire and hot gases.

712.1 Fire test criteria. Fire-resistant joint systems shall be tested in accordance with requirements of UL 2079.

NOTE: The following is a synopsis of the ANSI/UL 2079 *Tests for Fire Resistance of Building Joint Systems*: There are 3 components to this test standard: Pre-conditioning cycle testing, furnace testing, and the hose stream test. The excerpt is included for informational purposes. Contact Underwriters Laboratories, Inc. (847) 272-8800 for the complete test standard.

9.6 Each joint system is to be subjected to movement cycling prior to the fire test. The joint system is to be installed at it nominal width. The movement cycling is to consist of any one of the conditions specified in Table 9.1. A movement cycle is to consist of the joint system width being nominal, maximum, minimum and then nominal

Table 9.1

Conditions of test specimen cycling

Minimum number of cycles	Minimum cycling rate (cycles per minute)	UL Class*
500	1	I
500	10	II
100	30	III

*UL Class added for reference.
Only UL Listings showing Class II and Class III meet this code.

Contact Metal-Lite, Inc., call toll free: 800-236-0302