

NAINovia Associates,
Inc.1 Northwestern Drive
Salem, NH 03079
Phone 603-898-8600
Fax 603-898-2755
info@noviaassociates.com**SSD-2001****SEISMIC RESTRAINT TYPE KEY**

1st Field	2nd Field	3rd Field	4th Field
TRADE	MULTIPLE	TYPE	ORIENTATION
S = SHEETMETAL M = MECHANICAL E = ELECTRICAL F = FIRE PROTECTION P = PLUMBING	MAY BE LEFT BLANK When "M" is designated, two or more pipes, conduit, etc. will be tied together then restrained with a single restraint.	See Table below for listing of nine Types. Note: if Type is preceded by (2) this indicates two restraints are to be used at one location.	T = Transverse (Perpendicular to pipe run) L = Longitudinal (Along pipe run axis)
Coordinated (or contract drawings) will be marked-up with this symbol which dedesignates the restraint required at a particular location.			T/L = Transverse & longitudinal (Both ways) Note: T/L restraints may be used in either a "T" or "L" orientation to increase the load holding capacity.
SEE DRAWINGS SSD-2003, 2004 & 2005 FOR INSTALLATION DETAILS.			

T - M - X - O**LOCATION****SEISMIC RESTRAINT TYPES**

TYPE	RESTRAINT TYPE	CONCRETE ANCHOR	EMBED (in.)	WELD LENGTH (in.)
1	1/8" DIA. CABLE BRACE	3/8" HILTI KBIII	2-1/2	2"
2	1/8" DIA. CABLE BRACE	5/8" HILTI KBIII	4	2"
3	1/4" DIA. CABLE BRACE	(2) 5/8 HILTI KBIII	4	2"
4	SINGLE ARM STRUT BRACE	3/8" HILTI KBIII	2-1/2	2"
5	SINGLE ARM STRUT BRACE	5/8" HILTI KBIII	4	2"
6	SINGLE ARM STRUT BRACE	(2) 5/8 HILTI KBIII	4	2"
7	1/8" DIA. CABLE BRACE	3/8" HILTI KBIII	2-1/2	2"
8	1/8" DIA. CABLE BRACE	5/8" HILTI KBIII	4	2"
9	1/4" DIA. CABLE BRACE	(2) 5/8 HILTI KBIII	4	3"

HILTI KBIII KWIK BOLTS ARE THE STANDARD ANCHOR.

1/4" FILLET WELD LENGTHS ARE GIVEN AS AN OPTIONAL ATTACHMENT METHOD TO STRUCTURAL STEEL IN LIEU OF CONCRETE ANCHORS SHOULD FIELD CONDITIONS REQUIRE.

THE SAME DIAMETER A-307 BOLTS MAY BE USED FOR ATTACHMENT TO STEEL.

BY: RN | **CHKD:** RR | **DATE:** 12/06/06**PAGE:** 1 OF 1 | **DWG.NO.:** SSD-2001