### OVERALL LOAD TABLE (1 of 2)

TABLE 1LOAD

|   | Max                         | imum Brace Loads                            | Allowable Values            |                 |  |                 |  |  |  |  |
|---|-----------------------------|---|-----------------------------|-----------------|--|-----------------|--|--|--|--|
|   | C                           | Configuration                               | 45 deg Brac<br>Tension (lb) |                 | 60 deg Brace from Horiz<br>Tension (lb) Comp. (lb) |                 |  |  |  |  |
| * | S                           | Fig 981 w/<br>3/8" to 7/8" Rod              | 1263                        | <del>1843</del> | <del>1320</del>                                    | 1227            |  |  |  |  |
| * | General Bracket Connections | Fig 985 w/<br>3/8" to 5/8" Rod              | 813                         | <del>1030</del> | 693  | <del>1123</del> |  |  |  |  |
| * | Bracket C                   | Fig 986                                     | 787                         | <del>847</del>  | 797  | <del>927</del>  |  |  |  |  |
|   | General                     | Fig 990 w/<br>3/16" Dia Cable               | 1387                        | 0               | 1507   | 0               |  |  |  |  |
|   |                             | Fig 991 w/<br>3/16" Dia Cable               | 1023                        | 0               | 1073   | 0               |  |  |  |  |
| * | Connections                 | 4" Clevis Hanger/<br>Fig 980 w/<br>5/8" Rod | <del>1105</del>             | 303             | <del>864</del>                                     | 310             |  |  |  |  |
| * |                             | 6" Clevis Hanger/<br>Fig 980 w/<br>3/4" Rod | <del>1175</del>             | 665             | <del>1181</del>                                    | 503             |  |  |  |  |
| * | Fig 1 Bracket               | 8" Clevis Hanger/<br>Fig 980 w/<br>3/4" Rod | <del>1540</del>             | 450             | <del>1073</del>                                    | 390             |  |  |  |  |



1. A factor of Safety of 3.0 is applied to the lowest of ultimate loads.



\* Deleted by the City of Los Angeles

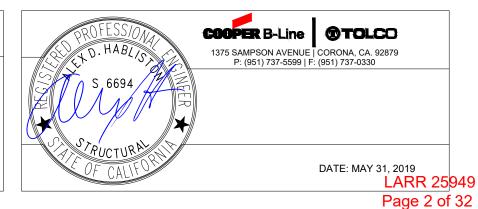
## OVERALL LOAD TABLE (2 of 2)

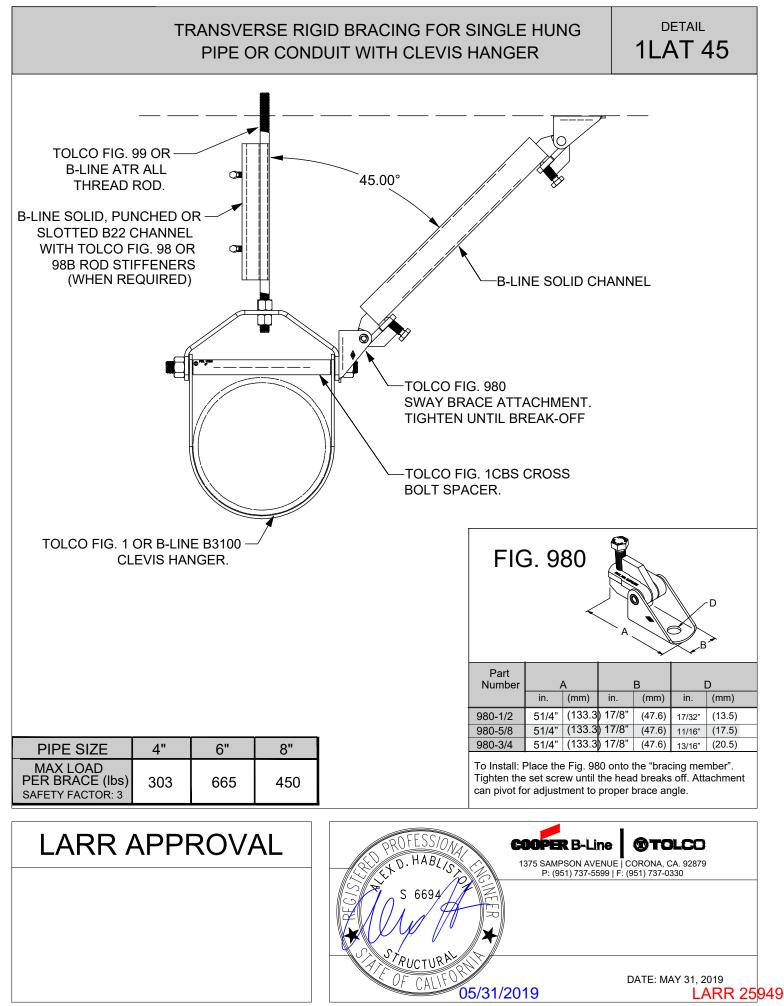
TABLE 2LOAD

| М               | aximum Loads | Allowable Values              |      |     |                               |     |  |  |  |  |
|-----------------|--------------|-------------------------------|------|-----|-------------------------------|-----|--|--|--|--|
| PART NUMBER     |              | CLAMP<br>Design<br>Load Pt Pl |      |     | GUIDE<br>Design<br>Load Pt Pl |     |  |  |  |  |
|                 | 9ZN-1205     | 570                           | 482  | 155 | 570                           | 482 |  |  |  |  |
| Hold Down Clamp | 9ZN-1208     | 570                           | 482  | 155 | 570                           | 482 |  |  |  |  |
|                 | 9ZN-1241     | 1031                          | 1240 | 702 |                               |     |  |  |  |  |
|                 | B355         | 1196                          | 503  | 180 |                               |     |  |  |  |  |

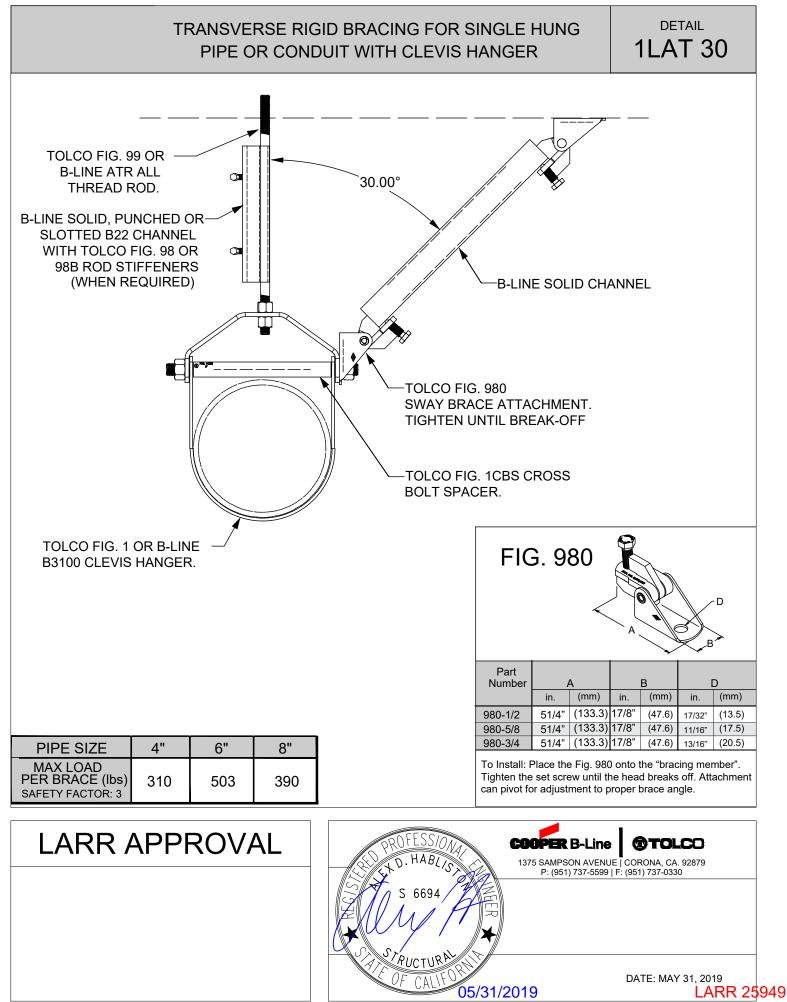
### LARR APPROVAL

1. A factor of Safety of 3.0 is applied to the lowest of ultimate loads.

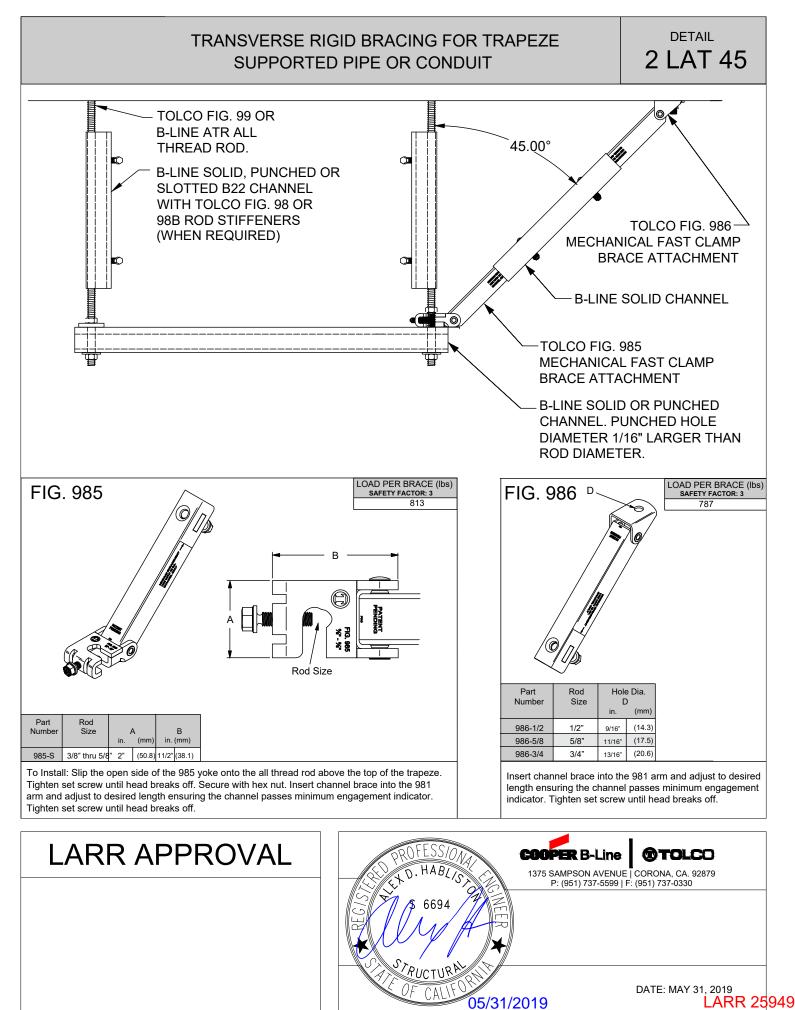




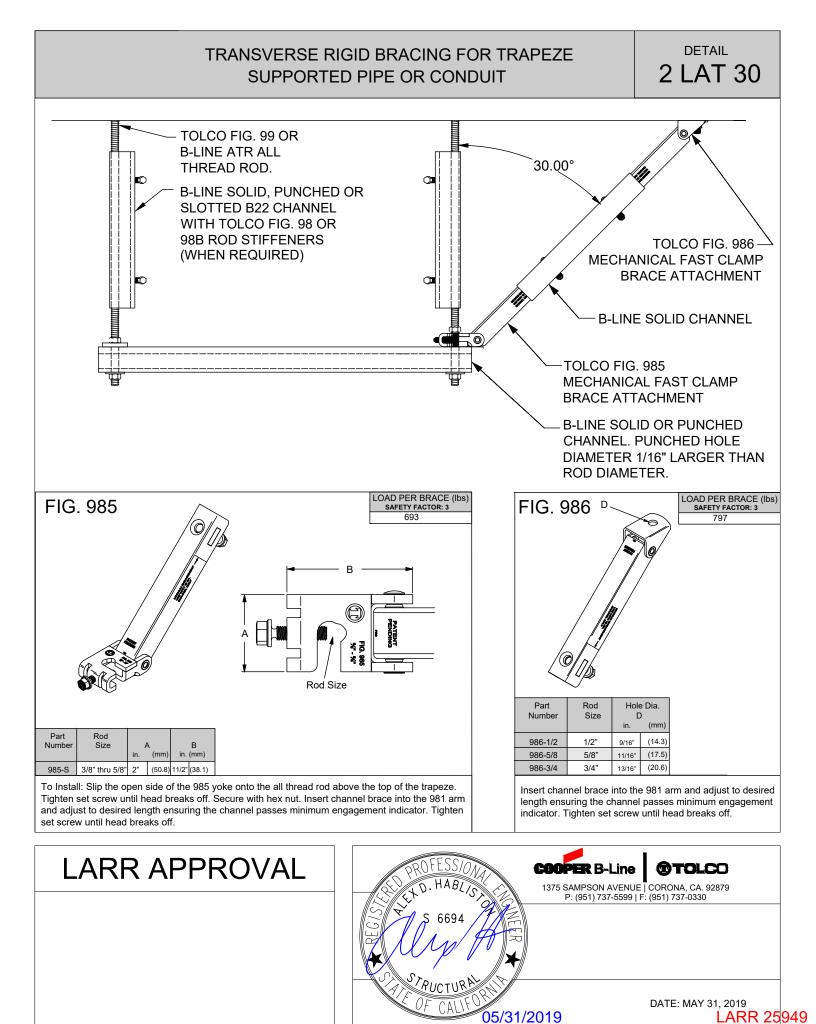
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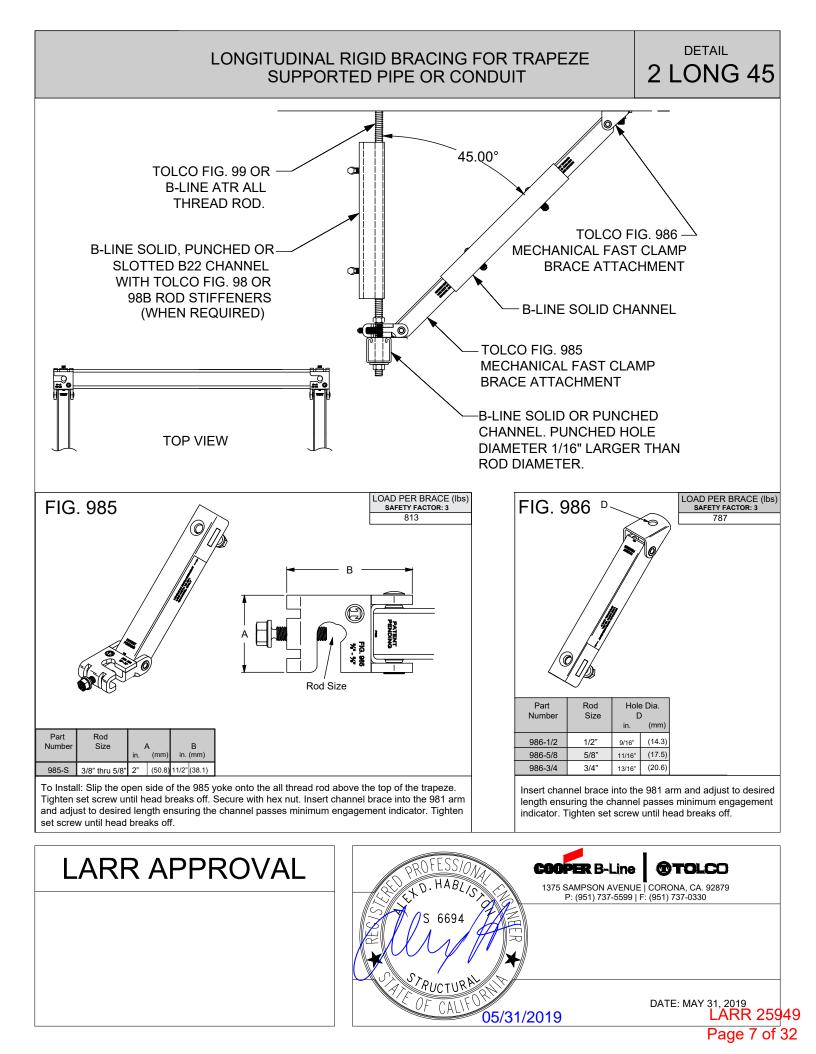
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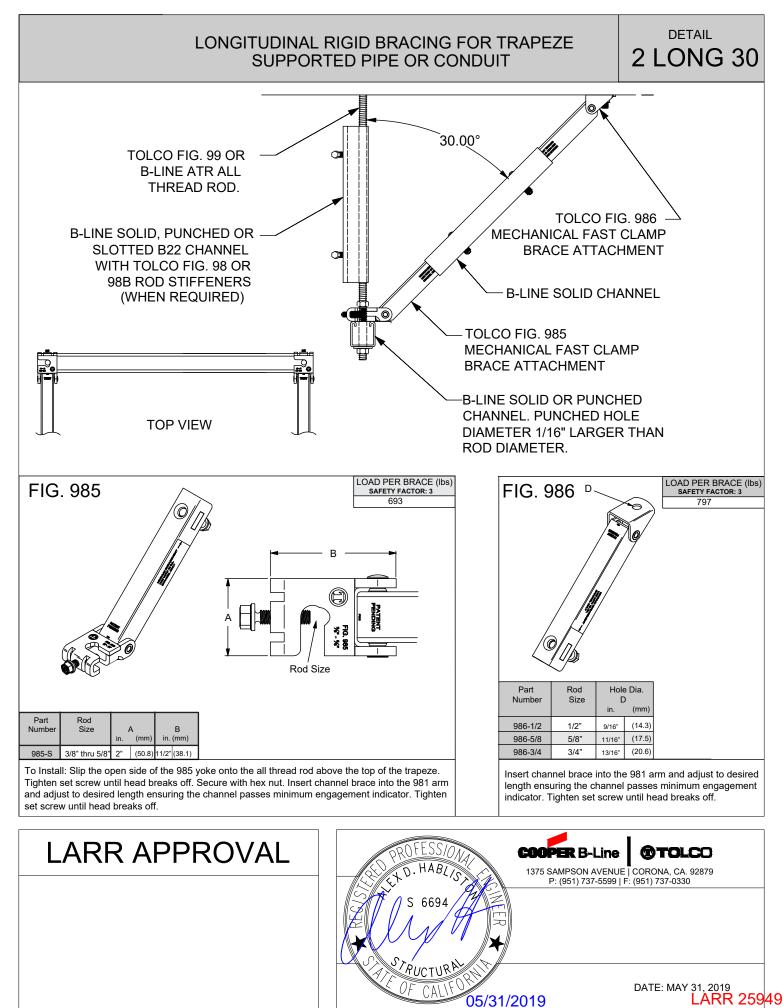


| L/ | VI VI | <b>\</b> | 20 | 0- |
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| Pa | ae    | 5        | of | 32 |



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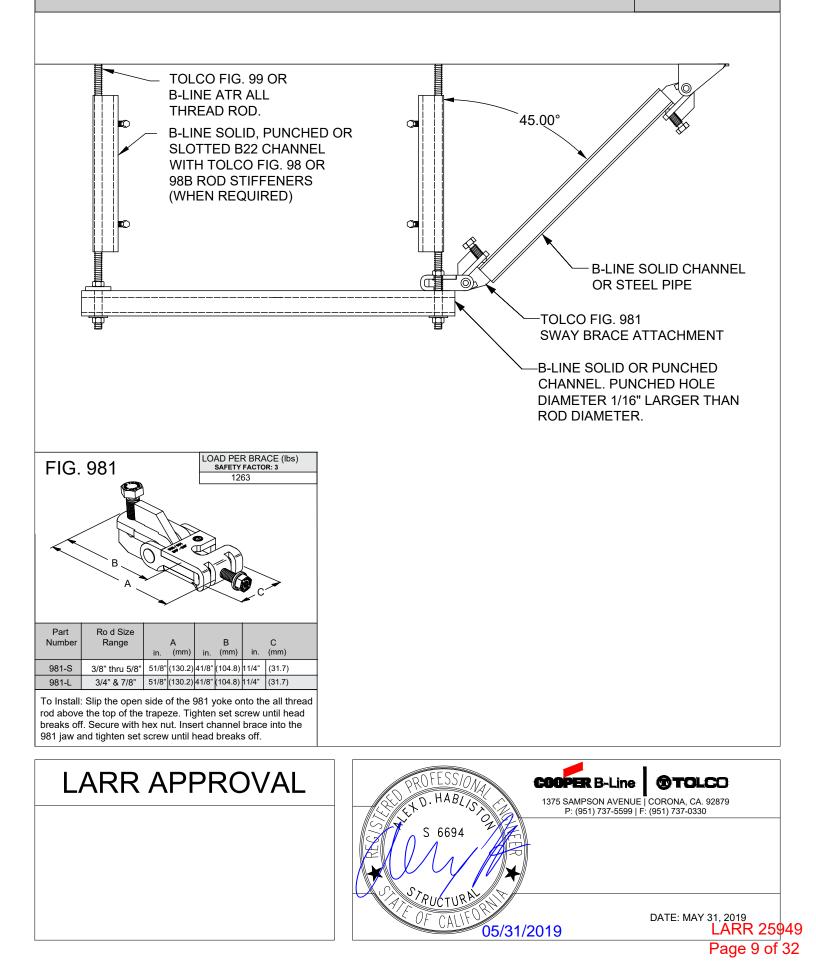




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| Pa | d | е | 8   | of  | 32 |

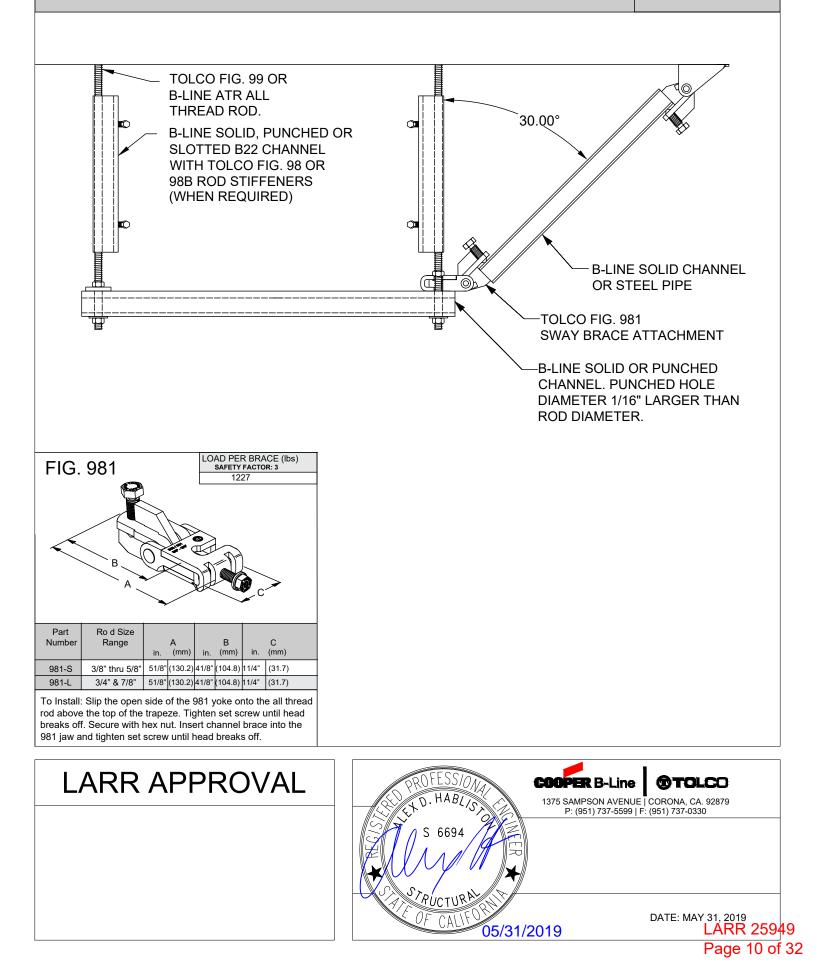
### TRANSVERSE RIGID BRACING FOR TRAPEZE SUPPORTED PIPE OR CONDUIT

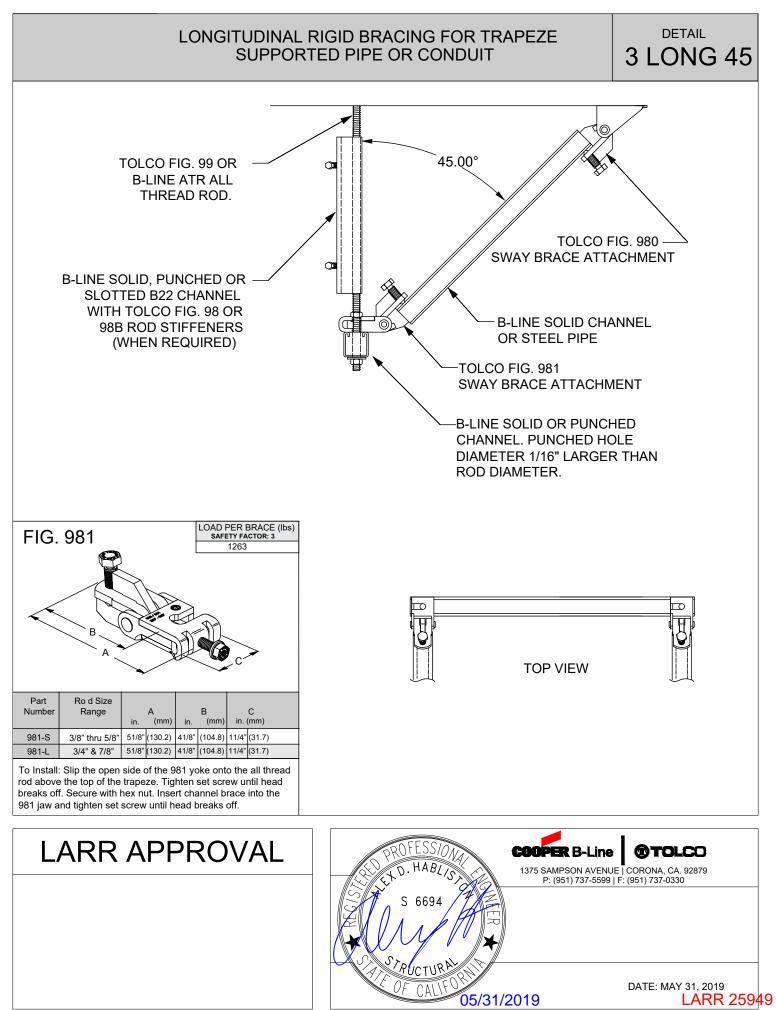
3 LAT 45



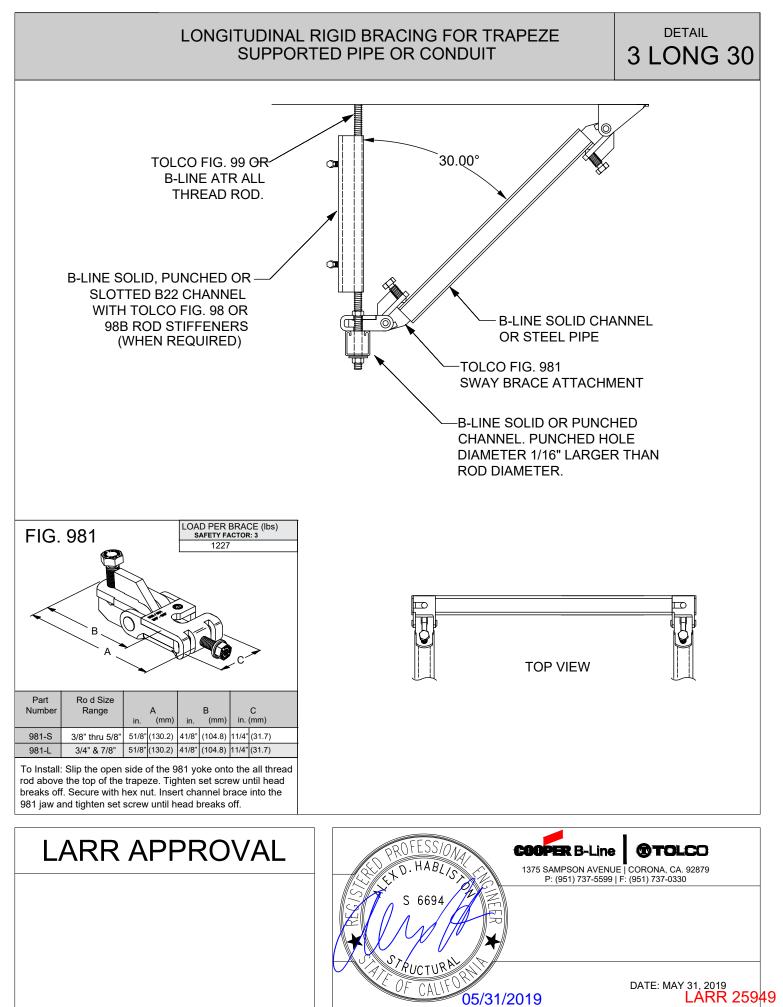
### TRANSVERSE RIGID BRACING FOR TRAPEZE SUPPORTED PIPE OR CONDUIT

3 LAT 30

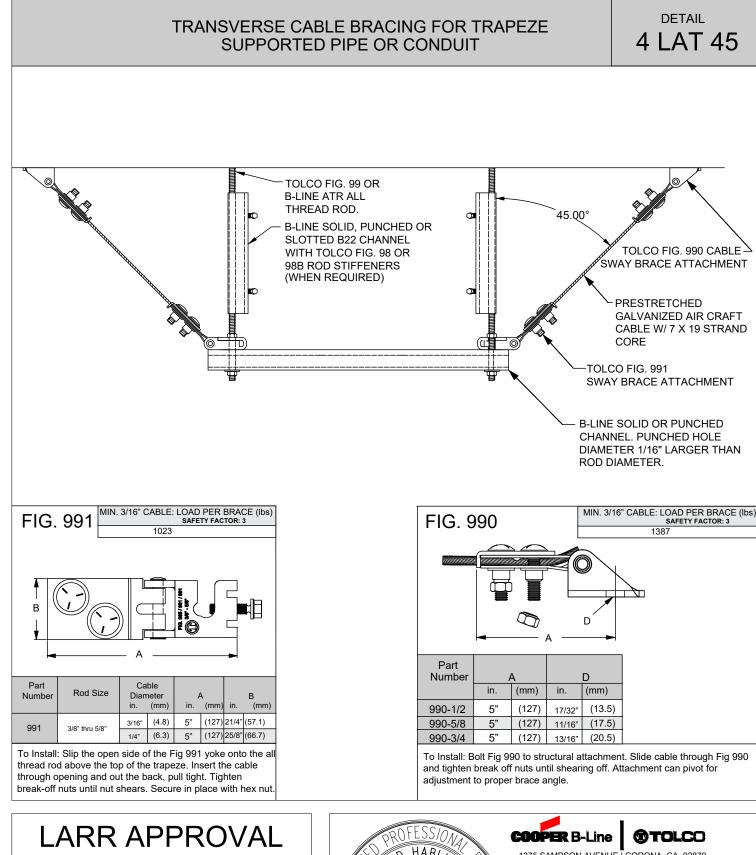




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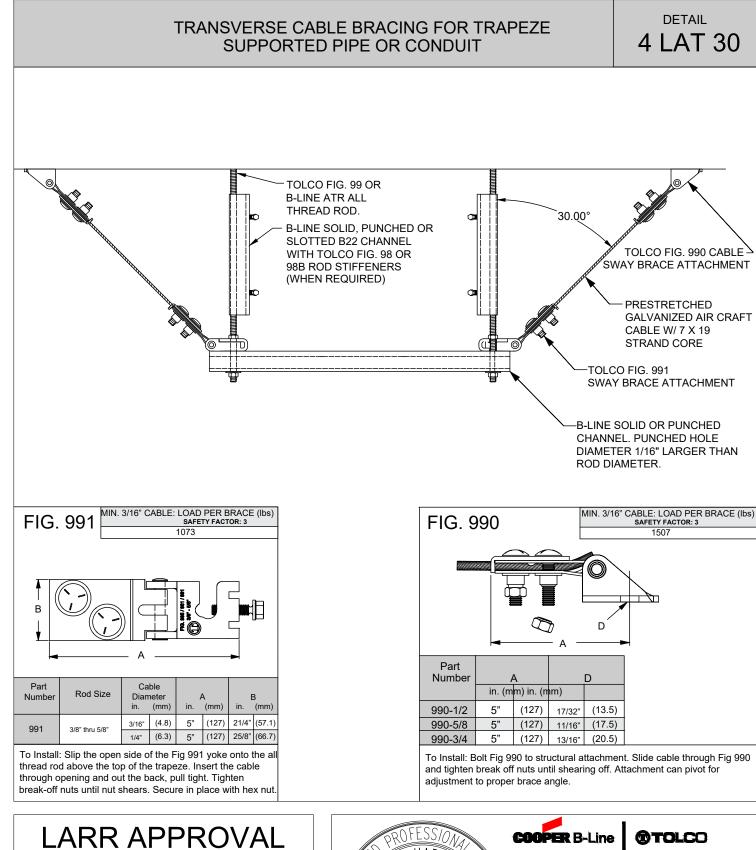


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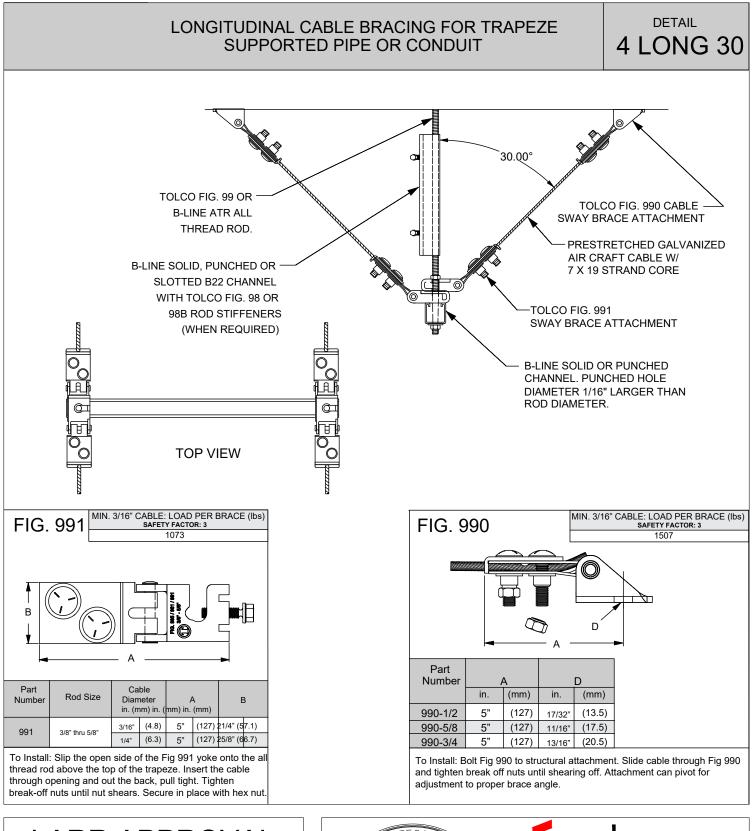
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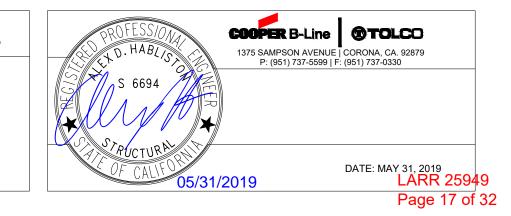


45.00°  $\mathbf{\Omega}$ TOLCO FIG. 990 CABLE TOLCO FIG. 99 OR SWAY BRACE ATTACHMENT **B-LINE ATR ALL** THREAD ROD. PRESTRETCHED GALVANIZED AIR CRAFT CABLE W/ B-LINE SOLID, PUNCHED OR 7 X 19 STRAND CORE SLOTTED B22 CHANNEL WITH TOLCO FIG. 98 OR TOLCO FIG. 991 98B ROD STIFFENERS SWAY BRACE ATTACHMENT (WHEN REQUIRED) B-LINE SOLID OR PUNCHED CHANNEL. PUNCHED HOLE **DIAMETER 1/16" LARGER THAN** ROD DIAMETER. Q भ TOP VIEW MIN. 3/16" CABLE: LOAD PER BRACE (Ibs) SAFETY FACTOR: 3 MIN. 3/16" CABLE: LOAD PER BRACE (Ibs) SAFETY FACTOR: 3 FIG. 990 FIG. 991 1023 1387 B D Part Number D Part Cable in. (mm) in. (mm) Rod Size Number Diameter в in. (mm) in. (mm) in. (mm) 5" (13.5) (127) 990-1/2 17/32" 3/16" (4.8) 5" (127) 21/4" (57.1) 5" (17.5) 990-5/8 (127) 11/16" 991 3/8" thru 5/8" 1/4" (6.3) 5" (127) 25/8" (66.7) 5" (127) (20.5) 990-3/4 13/16" To Install: Slip the open side of the Fig 991 yoke onto the all To Install: Bolt Fig 990 to structural attachment. Slide cable through Fig 990 thread rod above the top of the trapeze. Insert the cable and tighten break off nuts until shearing off. Attachment can pivot for through opening and out the back, pull tight. Tighten adjustment to proper brace angle. break-off nuts until nut shears. Secure in place with hex nut.









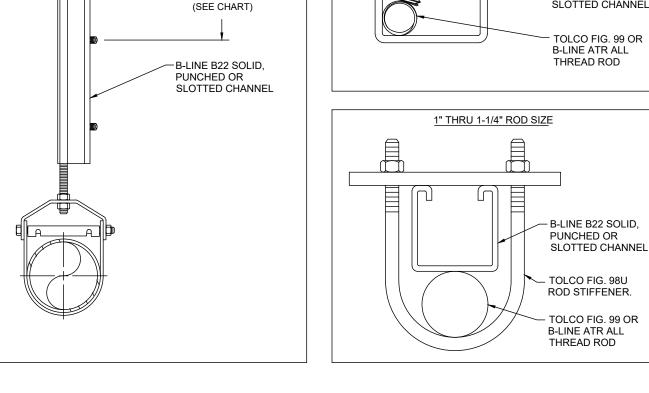
# LARR APPROVAL

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2"

(MAX.)

| ROD SIZE | MAX. ROD LENGTH<br>WITHOUT ROD STIFFENER | MAX. SPACING BETWEEN<br>TOLCO FIG. 98 |  |  |  |  |
|----------|--|---------------------------------------|--|--|--|--|
| 3/8"     | 19"                                      | 13"                                   |  |  |  |  |
| 1/2"     | 25"                                      | 18"                                   |  |  |  |  |
| 5/8"     | 31"                                      | 23"                                   |  |  |  |  |
| 3/4"     | 37"                                      | 28"                                   |  |  |  |  |
| 7/8"     | 43"                                      | 33"                                   |  |  |  |  |
| 1"       | 50"                                      | 38"                                   |  |  |  |  |
| 1 1/4"   | 62"                                      | 43"                                   |  |  |  |  |



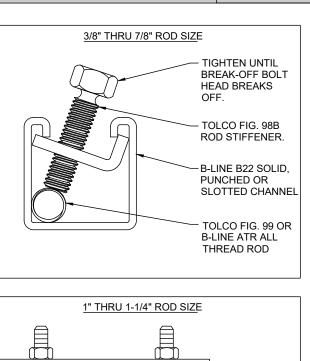
6" MAX. DISTANCE FROM

TOP OF HANGER ROD

TO FIRST STIFFENER

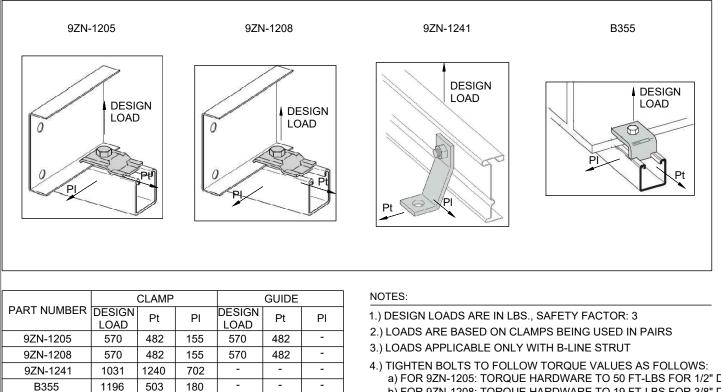
MAX. SPACING

**BETWEEN FIG. 98B** 



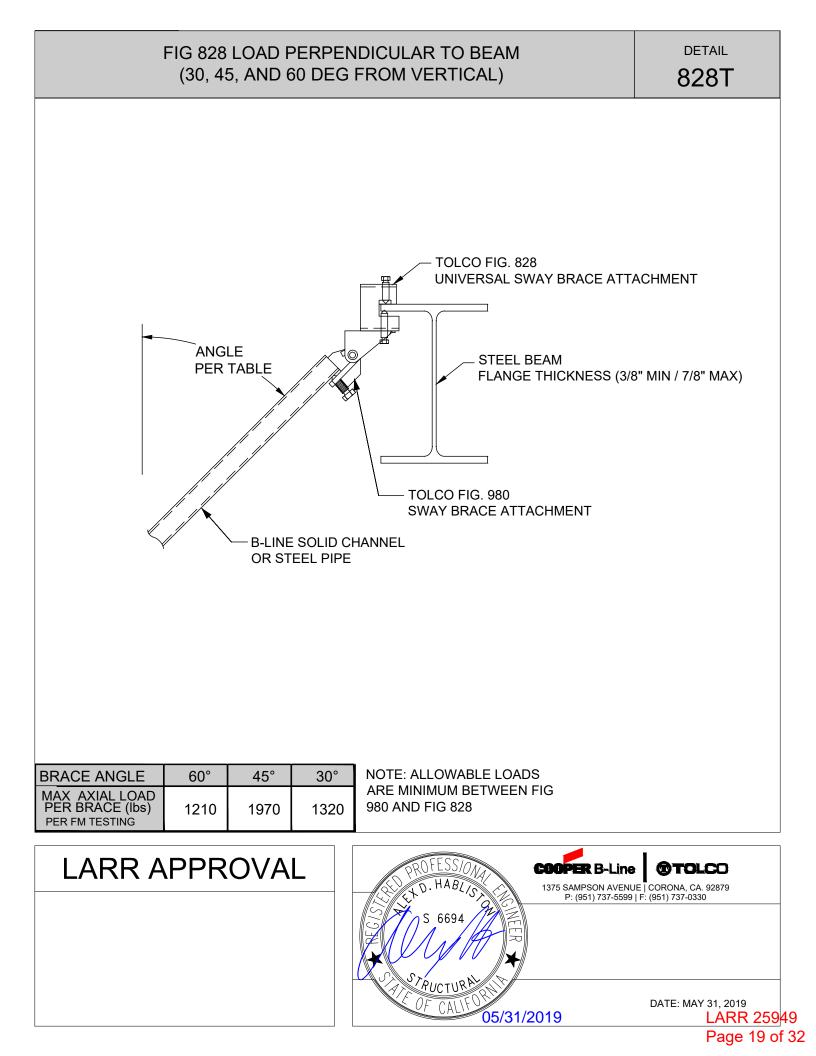
### B-LINE 9ZN-1205, 9ZN-1208, 9ZN-1241 & B355 HOLD DOWN CLAMP

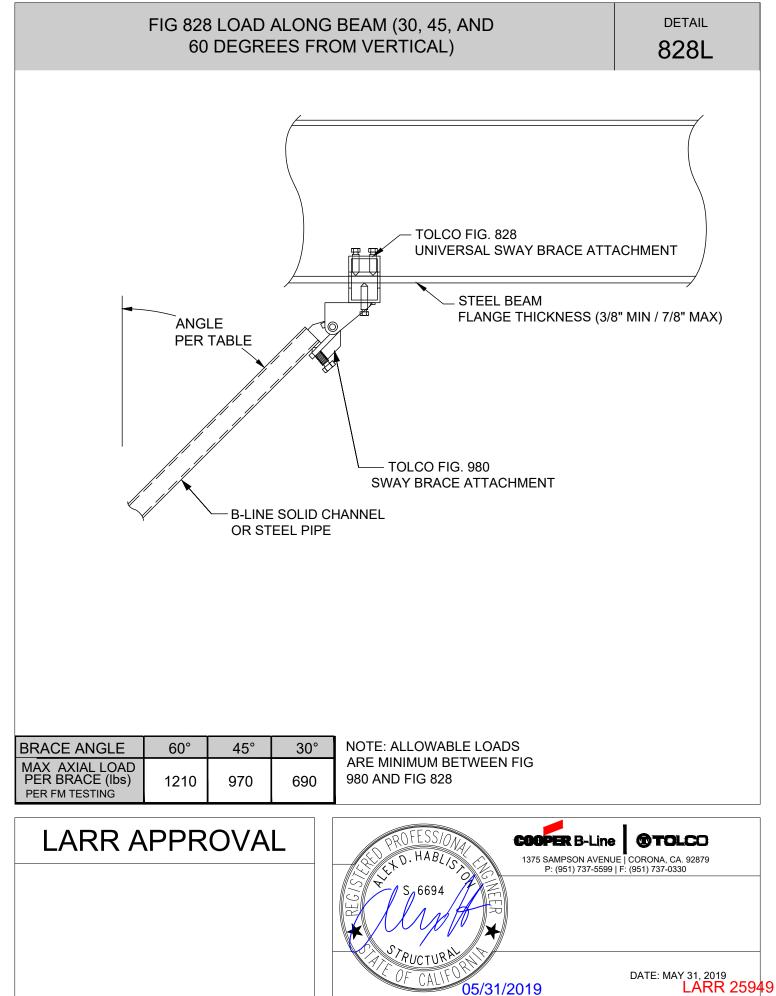
DETAIL



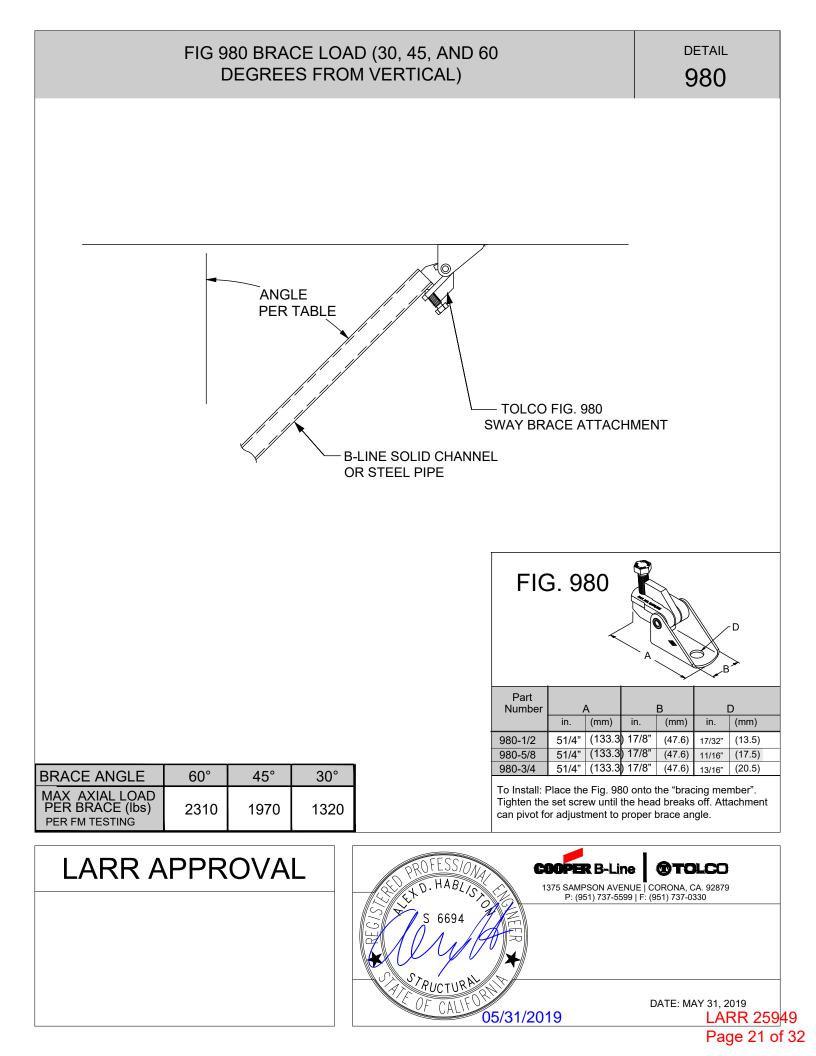
a) FOR 9ZN-1205: TORQUE HARDWARE TO 50 FT-LBS FOR 1/2" DIA b) FOR 9ZN-1208: TORQUE HARDWARE TO 50 FT-LBS FOR 1/2" DIA c) FOR 9ZN-1241: TORQUE HARDWARE TO 19 FT-LBS FOR 3/8" DIA d) FOR B355: TORQUE HARDWARE TO 50 FT-LBS FOR 1/2" DIA

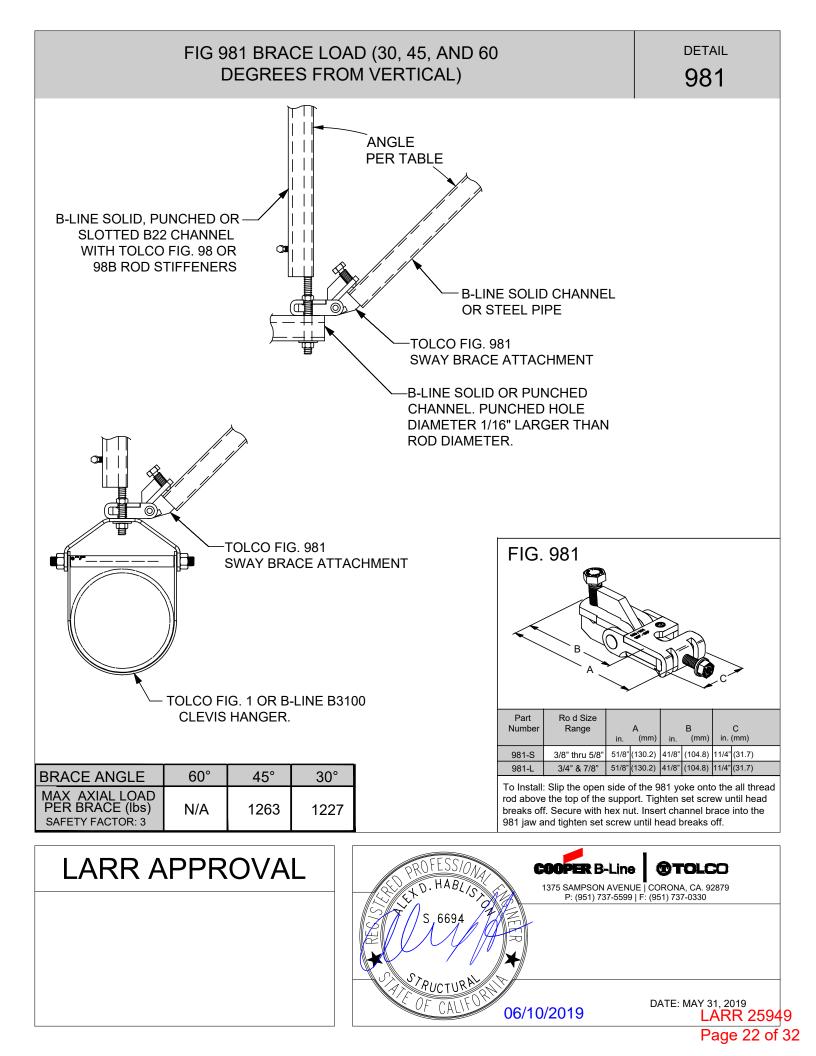


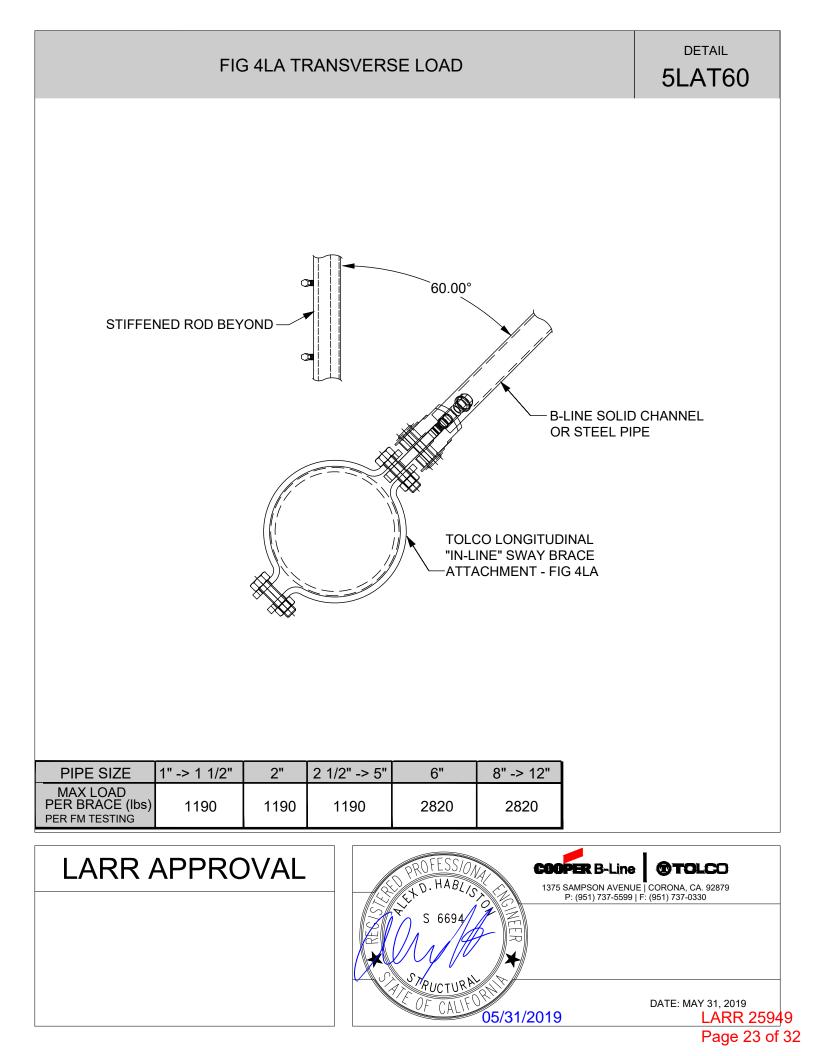


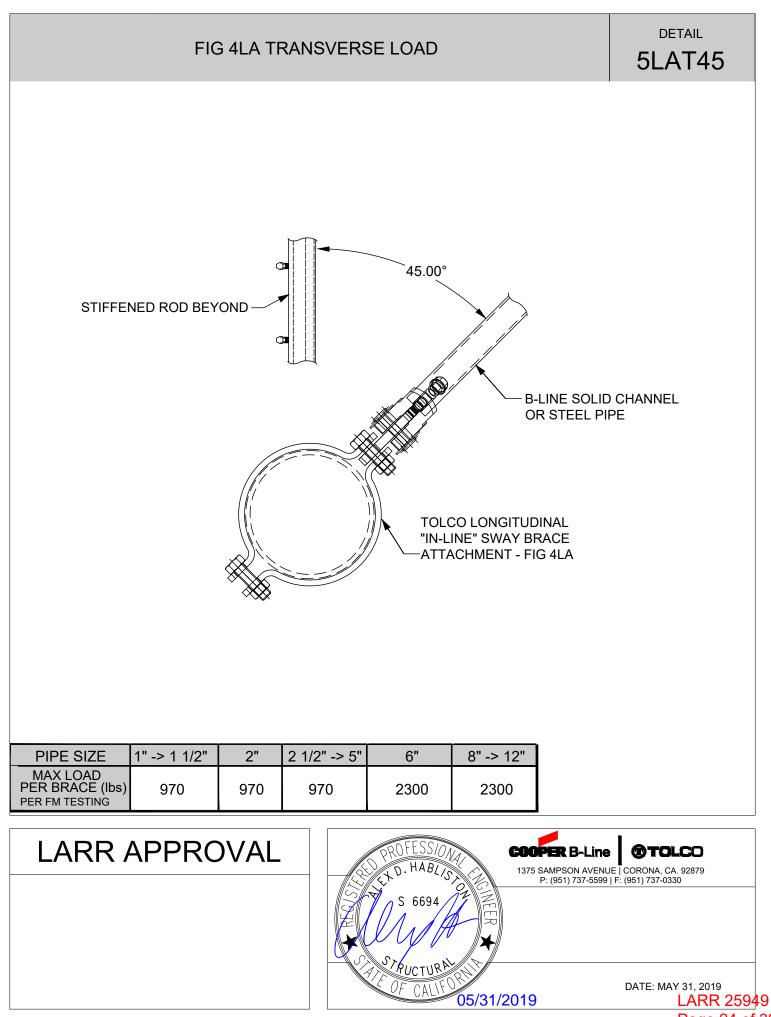


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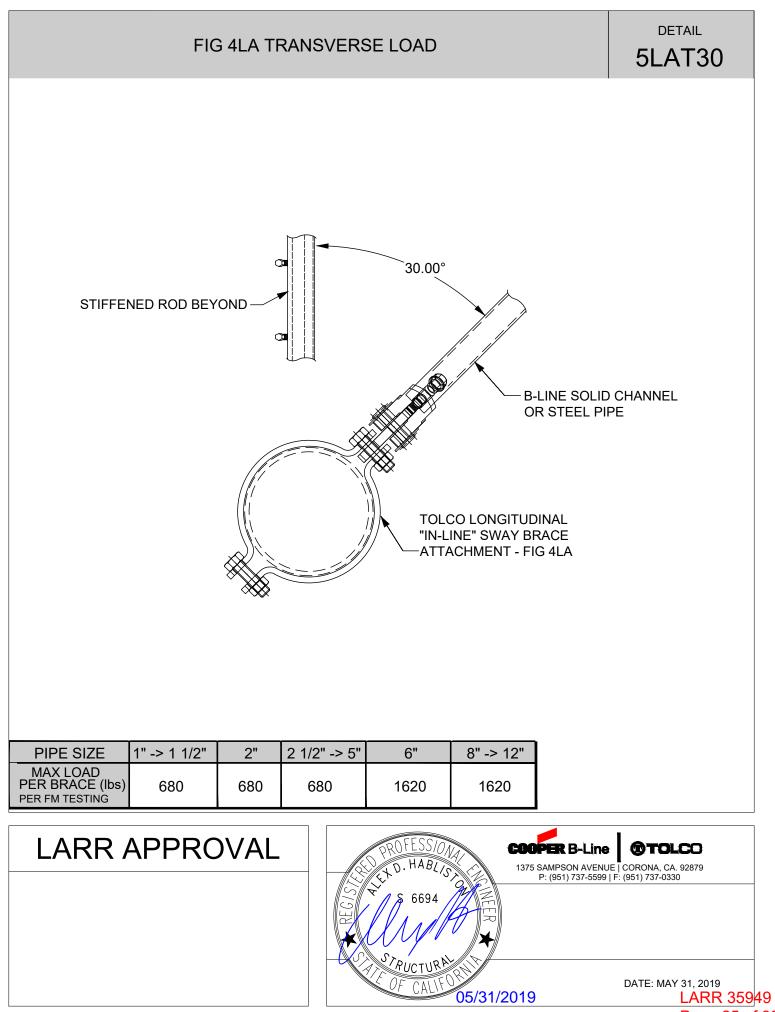




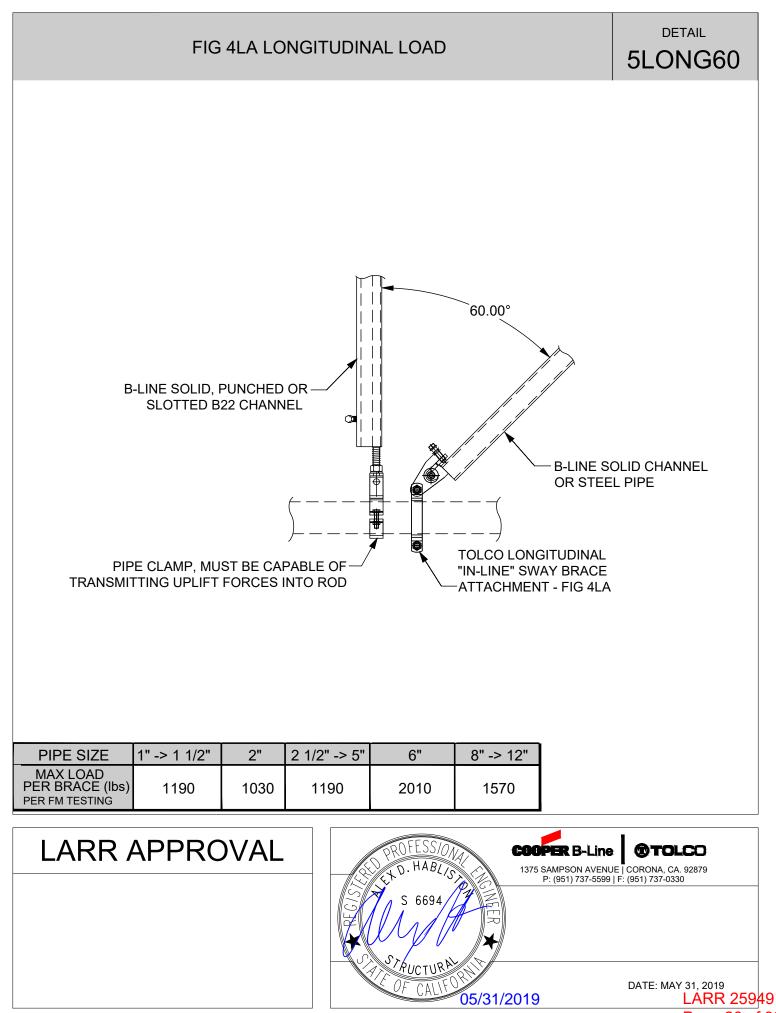




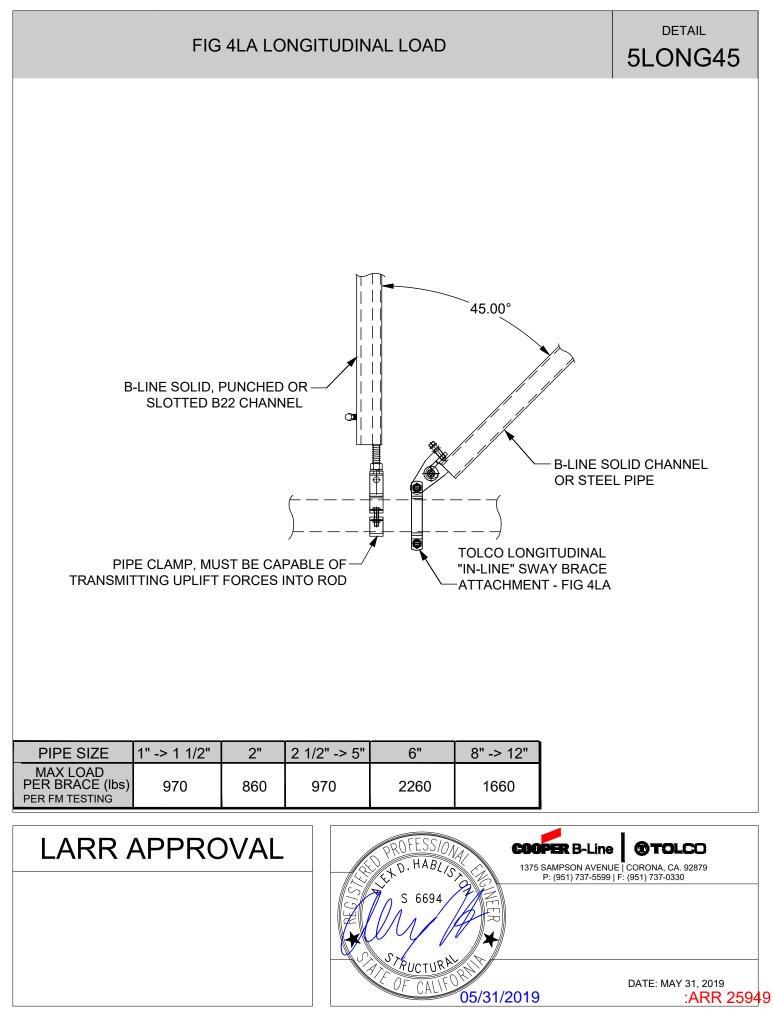
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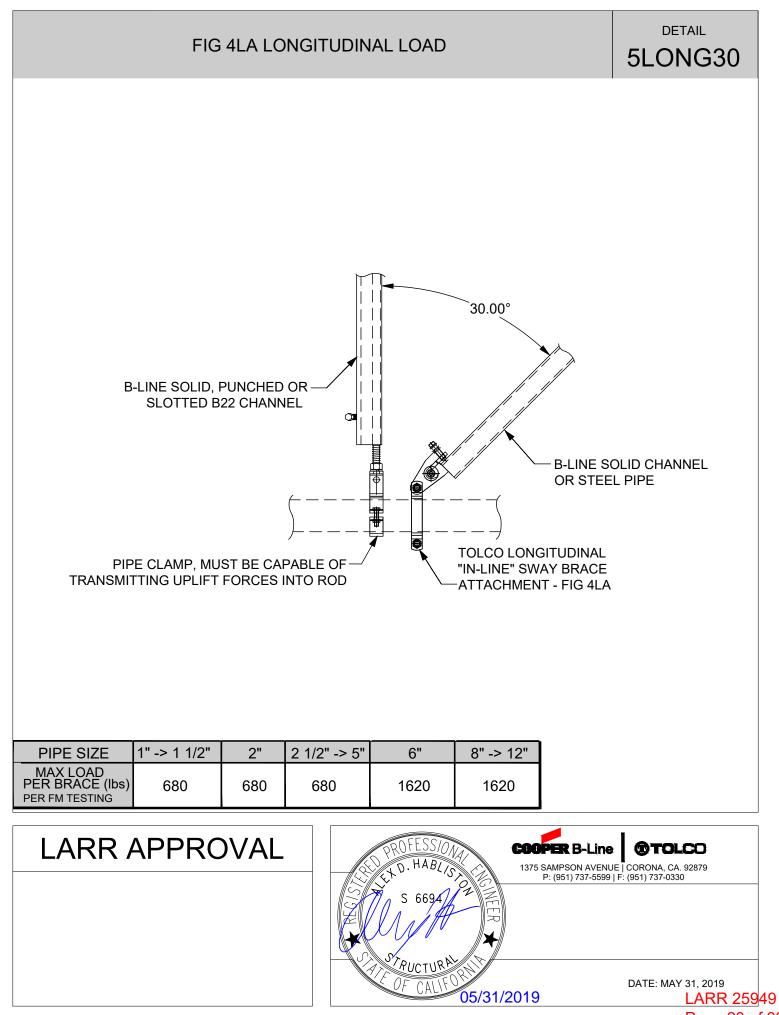
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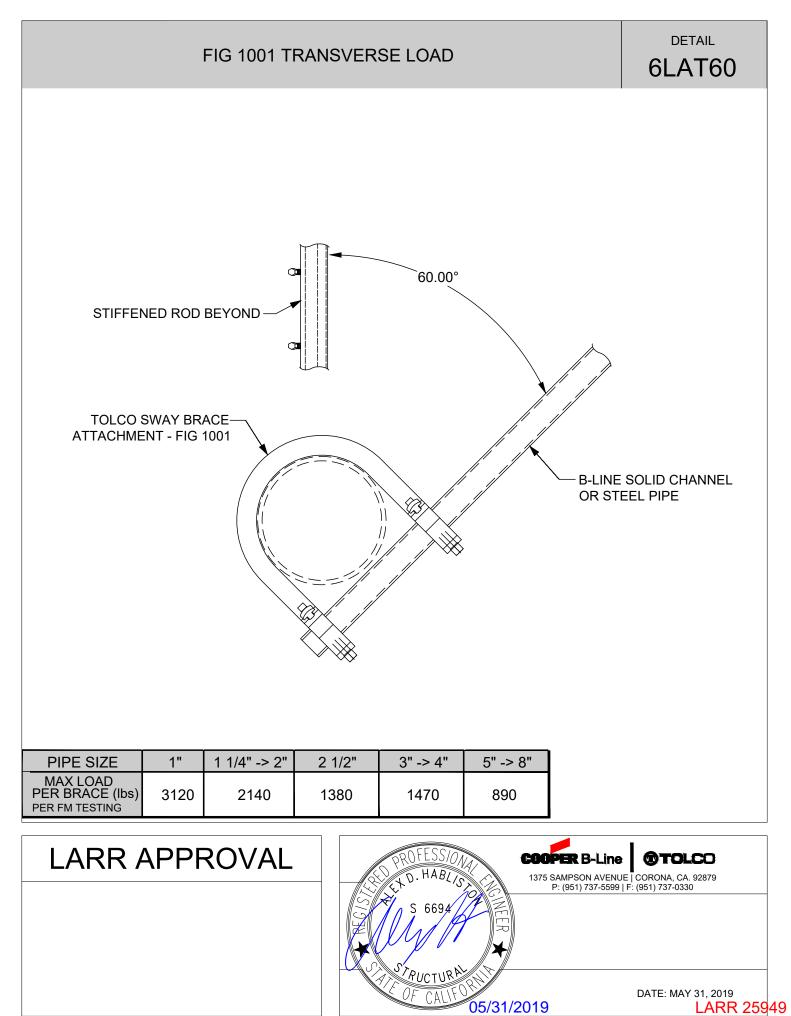
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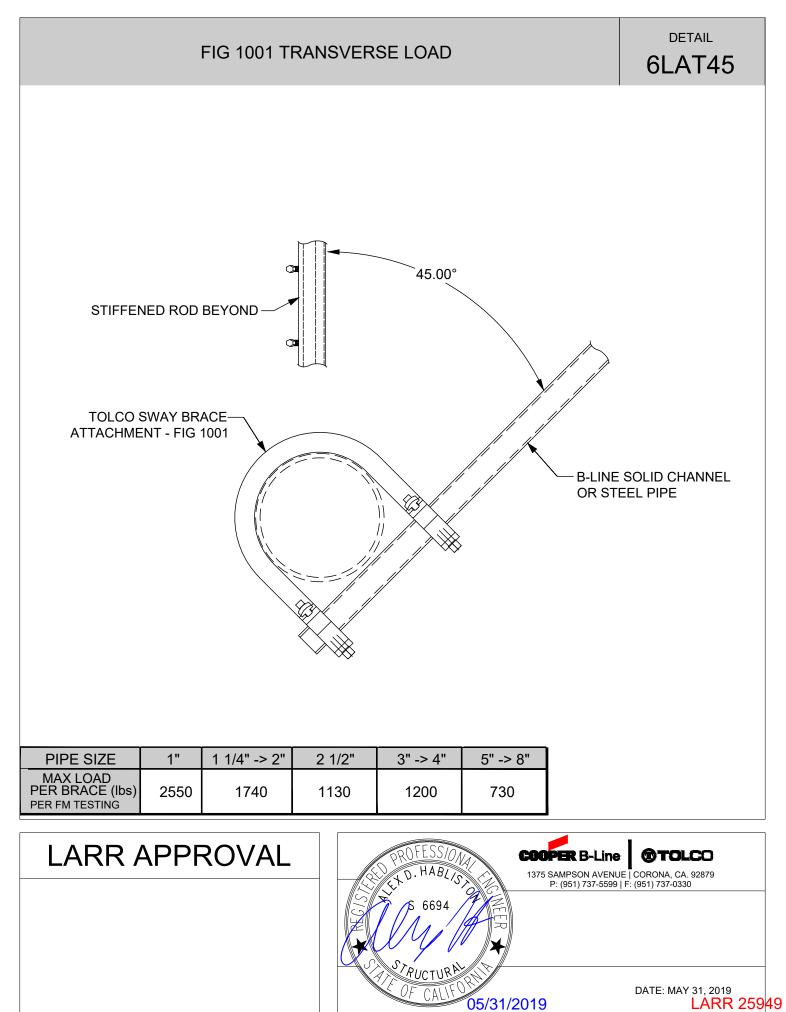
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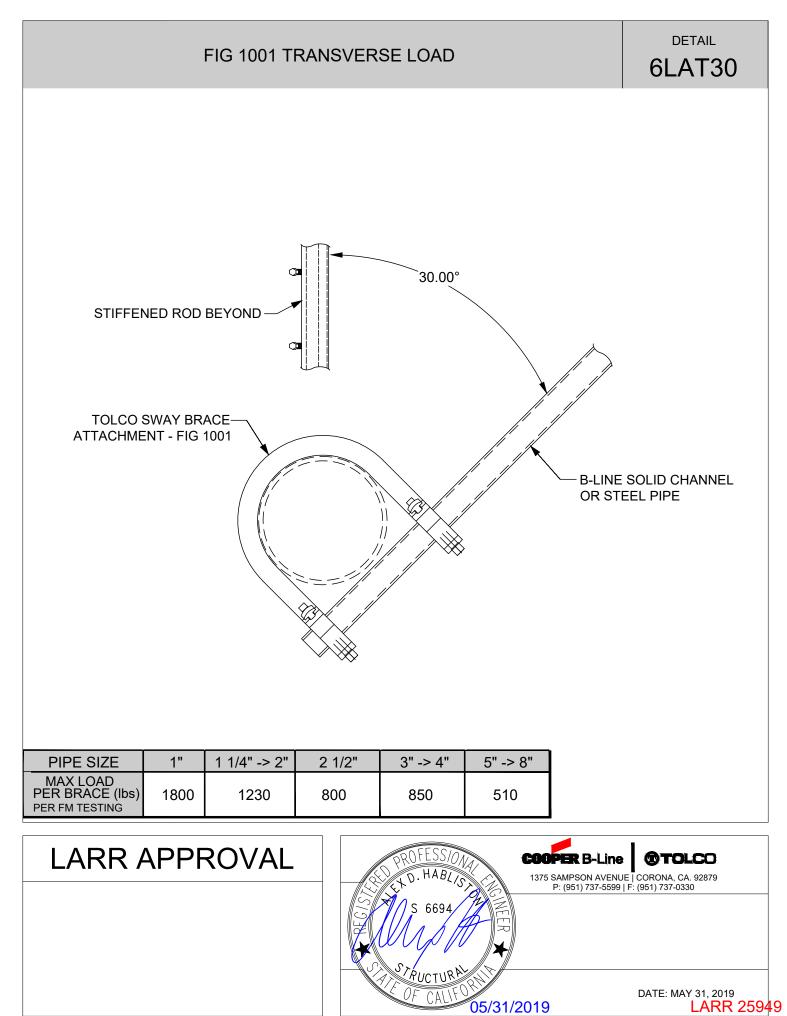
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**HC02** STEEL BEAM FLANGE THICKNESS (3/4" MAX) ALTERNATE TOLCO FIG 65XT-ORIENTATION REVERSIBLE STEEL C-CLAMP STEEL BEAM TOLCO FIG. 99 OR FLANGE THICKNESS **B-LINE ATR ALL** (3/4" MAX - FIG 68S) THREAD ROD. (1 1/4" MAX - FIG 68W) **TOLCO FIG 68S / 68W-**WIDE JAW C-CLAMP, TOLCO FIG 68S / 68W SET SCREW UP WIDE JAW C-CLAMP, SET SCREW DOWN TOLCO FIG. 99 OR **B-LINE ATR ALL** THREAD ROD.

DETAIL

#### MAX LOAD PER CLAMP PER FM CRITERIA (5.0xDL + 250 LB) LOADS SHOWN THUS '[XXX]' ARE ALLOWABLE DEAD LOAD ON CLAMP

| PIPE SIZE           | 3/4" | 1"   | 1 1/4" | 1 1/2" | 2"   | 2 1/2" | 3"    | 3 1/2" | 4"    | 5"    | 6"    | 8"    |
|---------------------|------|------|--------|--------|------|--------|-------|--------|-------|-------|-------|-------|
| FIGURE 65XT         | 340  | 410  | 430    | 520    | 635  | 940    | 1060  | 1255   | 1475  | N/A   | N/A   | N/A   |
|                     | [18] | [32] | [36]   | [54]   | [77] | [138]  | [162] | [201]  | [245] | N/A   | N/A   | N/A   |
| FIGURE 68S          | 340  | 410  | 430    | 520    | 635  | 940    | 1060  | 1255   | 1475  | N/A   | N/A   | N/A   |
| (SET SCREW UP/DOWN) | [18] | [32] | [36]   | [54]   | [77] | [138]  | [162] | [201]  | [245] | N/A   | N/A   | N/A   |
| FIGURE 68S          | 340  | 410  | 430    | 520    | 635  | 940    | 1060  | 1255   | 1475  | 2000  | 2615  | 3800  |
| (SET SCREW DOWN)    | [18] | [32] | [36]   | [54]   | [77] | [138]  | [162] | [201]  | [245] | [350] | [473] | [710] |
| FIGURE 68W          | 340  | 410  | 430    | 520    | 635  | 940    | 1060  | 1255   | 1475  | N/A   | N/A   | N/A   |
|                     | [18] | [32] | [36]   | [54]   | [77] | [138]  | [162] | [201]  | [245] | N/A   | N/A   | N/A   |

