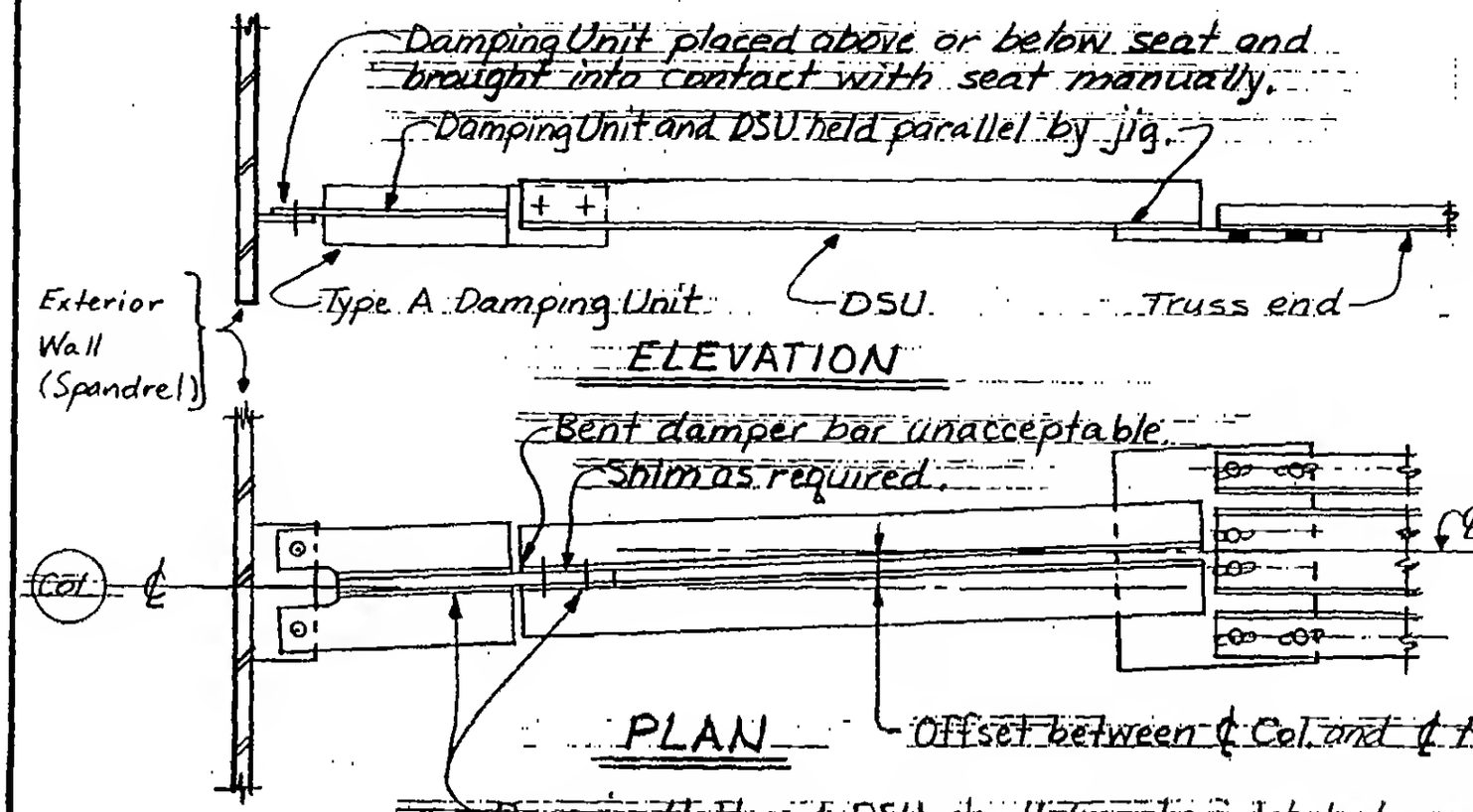
SKILLING, HELLE, CHRISTIANSEN & ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: DAMPING UNIT INSTALLATION PROCEDURE (A1-A7) | DATE: 8-10-70

REVISIONS



* Reaming at truss ends shall be confined to DSU angles or plates.

Damping Unit and DSU shall be straight between truss end and column seat.

DAMPING UNIT INSTALLATION PROCEDURE
(Details A1 through A7 inclusive)

1. Assemble Type A damping unit to corresponding DSU unit maintaining web of damping unit parallel to outstanding leg of DSU assembly. Provide one or more 18 gage shims (see Drawing D-AB1-1.2) as required to limit slack distance between faying surfaces of A325 friction connection to less than 1/16 inch. Torque 7/8 inch A325 bolts using turn-of-nut method. Provide A325 hardened washer under turned element.
2. Align damping unit - DSU assembly horizontally in a straight line from truss end to exterior wall seat with truss end bolts (A325 for A1, A2 and A6; A490 for A3, A4, A5, and A7) finger tight but shimmed in accord with Drawing D-AB1-1.1.
   * Light reaming to achieve alignment will be permitted by Surveillance Engineer where necessary to achieve correct alignment.
3. Place damping unit in contact with upper or lower face of exterior wall seat, whichever gives the best alignment. Where damping unit does not rest on seat, unit may be seated by one man manually pushing unit into contact with the seat. Install A490 bolts with A325 hardened washers at bolt head and nut. Provide shims in accord with Drawing D-AB1-1.2. Shims will generally be required only to correct for twist between damping unit web extensions and exterior wall seat.
4. Wrench tighten all bolts connecting truss end to DSU and between damping unit webs and exterior seat. Tighten all bolts by turn-of-nut method. Bolt tightness will be checked at random by an inspecting wrench in accord with paragraph 6(c) of "Specification for Structural Joints Using ASTM A325 or A490 Bolts."
5. In those cases where manual force will not seat damping units, sufficient shims shall be installed at truss end connection to allow damping unit to seat.
6. All damping units in which the included plate is permanently bent during installation shall be removed and replaced.
7. All damping units which, in the erected position, show a rotational or vertical displacement of the included bar with respect to the tees shall be removed and replaced where directed by the Surveillance Engineer.

DESIGNED EJW
DRAWN EJW
REVIEWED

D-AB2-1.3