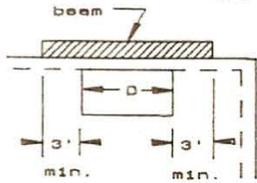


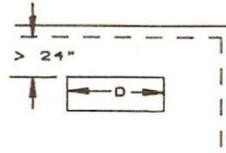
DESIGN GUIDE #PA-2: MODIFIED TOP OPENINGS FOR MWPS 74303 TANKS

DESIGN GUIDE #PA-2: MODIFIED TOP OPENINGS FOR MWPS 74303 TANKS
 (NOT CONFORMING TO 74303, SHT. 5/6)

I. OPENING SIZE: For any opening dimension "D" GREATER THAN 5' and LESS THAN 10' along any wall:



OR



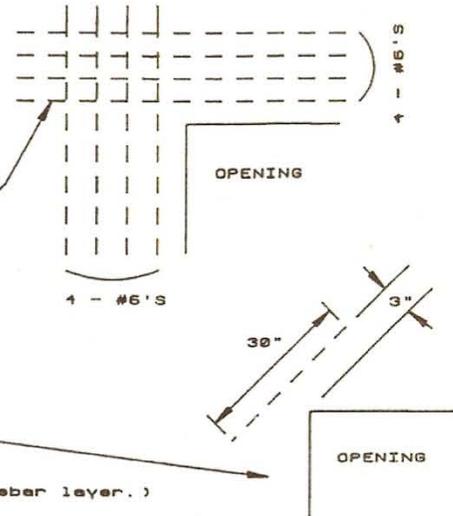
A. Add "beam" per MWPS-TR3 Table 7 or 74303 Table 8.

B. Keep opening > 24" from wall

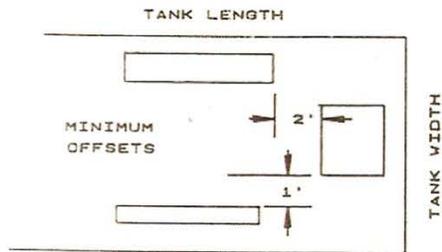
and,

II. ADDITIONAL REBARS:

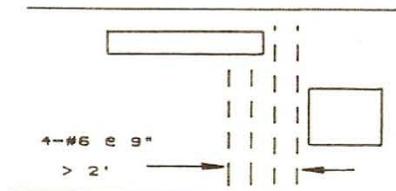
- A. Normal rebar spacing (Tables 2, 3, or 4) should NOT BE GREATER THAN 12" or LESS THAN 8". and
- B. Add 4-#6 rebars between normal rebars per 74303 (sht. 5/6): (as many as possible if near a wall), and
- C. Extra #6's length should extend at least beyond the perpendicular extra #6's (all "length" rebars, normal and extra, are to be in one layer above a single layer of "width rebars"), and
- D. Add 1-#5 (at least) diagonal at each opening corner, except where tank wall is one side of the opening. (This is a third layer above the length rebar layer.)



III. MULTIPLE OPENINGS:



- A. Minimum offsets between any two openings are shown at left.
- B. If the space required for the 4 extra #6's is greater than either offset, then the 4-#6 "width rebars" should extend the full tank width, or as long as possible.



EXAMPLE

ADW 6/19/96