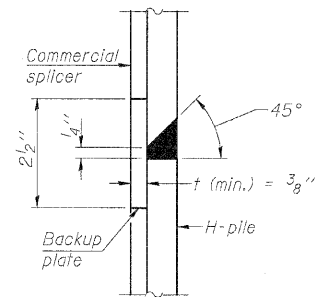


A schematic diagram of an I-beam cross-section. The total depth of the beam is labeled d . The width of the top flange is labeled b_f . The thickness of the flange is labeled t . The web thickness is indicated by a dimension line but not labeled with a symbol.

Designation	Depth d	F-flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 $\frac{1}{4}$ "	14 $\frac{7}{8}$ "	1 $\frac{3}{16}$ "	30"
x102	14"	14 $\frac{3}{4}$ "	1 $\frac{1}{16}$ "	30"
x89	13 $\frac{7}{8}$ "	14 $\frac{3}{4}$ "	5 $\frac{1}{8}$ "	30"
x73	13 $\frac{5}{8}$ "	14 $\frac{5}{8}$ "	1 $\frac{1}{2}$ "	30"
HP 12x84	12 $\frac{1}{4}$ "	12 $\frac{1}{4}$ "	1 $\frac{1}{16}$ "	24"
x74	12 $\frac{1}{8}$ "	12 $\frac{1}{4}$ "	5 $\frac{1}{8}$ "	24"
x63	12"	12 $\frac{1}{8}$ "	1 $\frac{1}{2}$ "	24"
x53	11 $\frac{3}{4}$ "	12"	7 $\frac{1}{16}$ "	24"
HP 10x57	10"	10 $\frac{1}{4}$ "	9 $\frac{1}{16}$ "	24"
x42	9 $\frac{3}{4}$ "	10 $\frac{1}{8}$ "	7 $\frac{1}{16}$ "	24"
HP 8x36	8"	8 $\frac{1}{8}$ "	7 $\frac{1}{16}$ "	18"



A technical diagram showing a cross-section of a splice assembly. It features an H-Pile (labeled 'H-Pile' with an arrow), a Commercial splicer (labeled 'Commercial splicer' with an arrow), and a Backup plate (labeled '** Backup plate' with an arrow). The diagram illustrates how the splicer and backup plate are used to join two sections of the H-Pile.

Diagram illustrating a commercial splice for an H-pile. The splice is shown with dimensions and labels:

- H-Pile**: The main structural member.
- Commercial splice**: The splice component.
- F**: Flange width.
- 10"**: Splice height.
- Typ. along splice**: Dimension $\frac{5}{16}$ inch.
- *Typ. along four edges of flange**: Dimension F_w .

Technical drawing of a circular wall opening with a welded wire fabric reinforcement. The drawing shows a cross-section of a wall with a circular opening. A welded wire fabric mesh is installed around the opening. The mesh is labeled "Welded wire fabric 6 x 6-W4.0 x W4.0 weighing 58#/100 sq. ft. Bend as required to fit into wall." The mesh is shown with a 3-inch clearance from the wall, labeled "3" cl.". The mesh is also labeled "H-pile".

Diagram of a square flange with dimensions and forces:

- Overall height: 10"
- Overall width: F
- Inner square dimensions: W_f (width) and H_f (height)
- Force F_w is applied along the four edges of the flange.
- Note: *Typ. along four edges of flange P

Technical drawing of a diamond-shaped pile cap (Detail C) showing its connection to an H-pile. The drawing includes labels for the H-Pile, horizontal force F_H , vertical force F_V , width W , and a note about the flange weld: ** Typ. along four edges of flange*.

Diagram illustrating a welded splice in a beam. The splice plate thickness is denoted as F . The distance from the beam centerline to the weld line is f . The weld length is l_4'' , and the maximum dimension is indicated as $max.$. The text "Splice plate Thickness F " is labeled.

Designation	F	F _f	F _w	W	W _f	W _w
HP 14x117	12 $\frac{1}{2}$ "	1"	7 $\frac{3}{8}$ "	7 $\frac{3}{4}$ "	5 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "
x102	12 $\frac{1}{2}$ "	7 $\frac{3}{8}$ "	3 $\frac{1}{4}$ "	7 $\frac{3}{4}$ "	5 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "
x89	12 $\frac{1}{2}$ "	3 $\frac{1}{4}$ "	1 $\frac{1}{8}$ "	7 $\frac{3}{4}$ "	5 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "
x73	12 $\frac{1}{2}$ "	5 $\frac{3}{8}$ "	9 $\frac{1}{8}$ "	7 $\frac{3}{4}$ "	5 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "
HP 12x84	10"	7 $\frac{3}{8}$ "	1 $\frac{1}{8}$ "	6 $\frac{1}{2}$ "	5 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "
x74	10"	7 $\frac{3}{8}$ "	1 $\frac{1}{8}$ "	6 $\frac{1}{2}$ "	5 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "
x63	10"	5 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	3 $\frac{3}{8}$ "
x53	10"	5 $\frac{3}{8}$ "	2"	6 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	3 $\frac{3}{8}$ "
HP 10x57	8"	3 $\frac{1}{4}$ "	9 $\frac{1}{16}$ "	5 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	3 $\frac{3}{8}$ "
x42	8"	5 $\frac{3}{8}$ "	9 $\frac{1}{16}$ "	5 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	3 $\frac{3}{8}$ "
HP 8x36	7"	5 $\frac{3}{8}$ "	7 $\frac{1}{16}$ "	4 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	3 $\frac{3}{8}$ "

SHEET NO. 70 77 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	280	81-1(VB-1)R	ROCK ISLAND	503	406
				CONTRACT NO. 64815	
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					