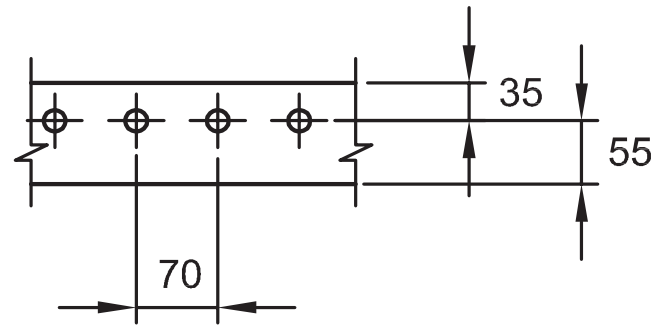
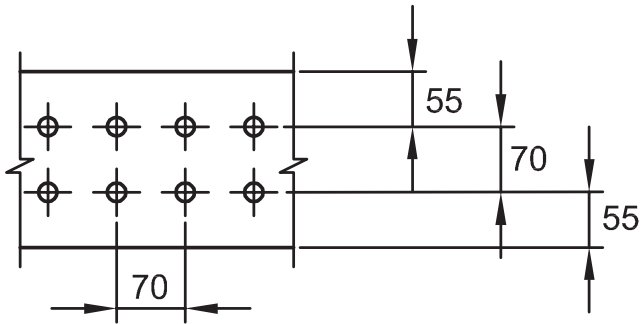


Two methods of manufacture are possible for the above connection components:

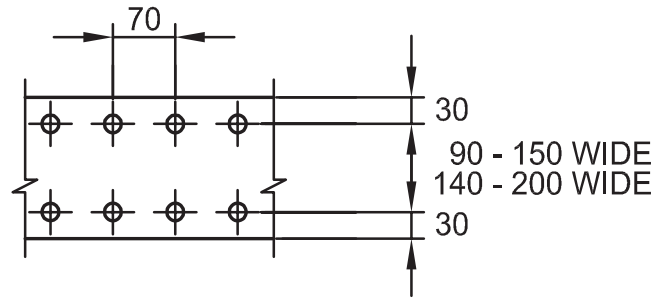
- (i) strip may be cut and holed by the fabricator's normal methods.
- (ii) strip may be pre-holed in long lengths and subsequently cropped to individual component lengths.



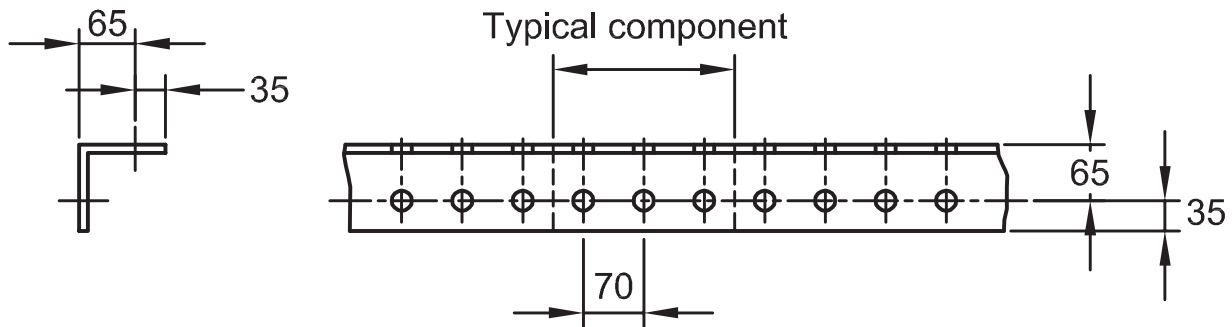
**FIGURE 3. 90X8 OR 90X10 FLAT BAR OR PLATE COMPONENT**



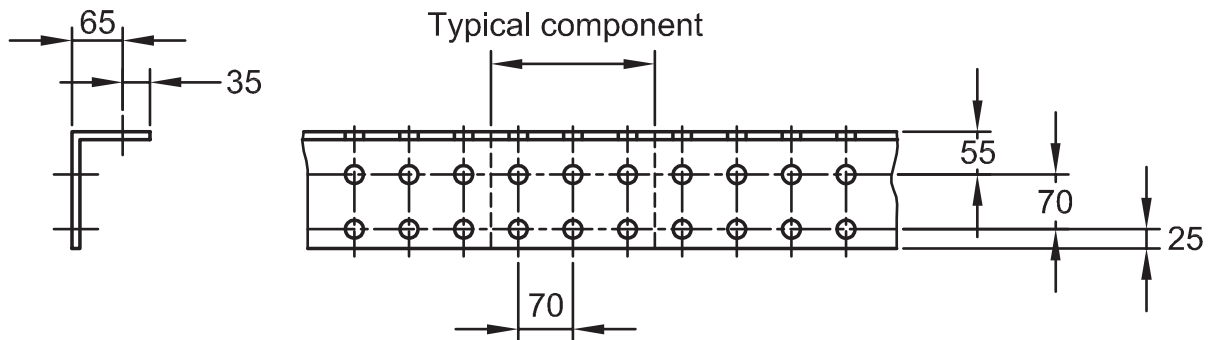
**FIGURE 4. 180X10 FLAT BAR OR PLATE COMPONENT**



**FIGURE 5. 200 OR 150X10 FLAT BAR OR PLATE COMPONENT**

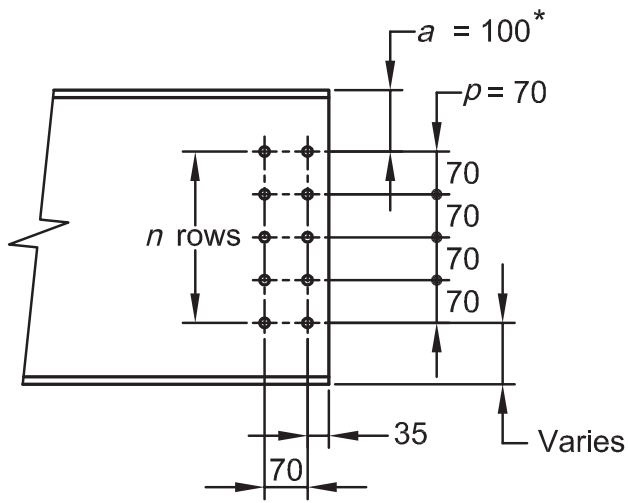


**FIGURE 6. 100X100X8 EA ANGLE COMPONENT**

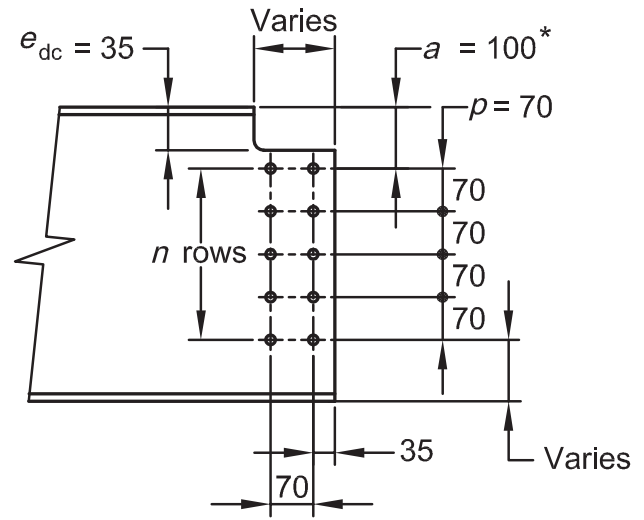


**FIGURE 7. 150X100X10 UA ANGLE COMPONENT**

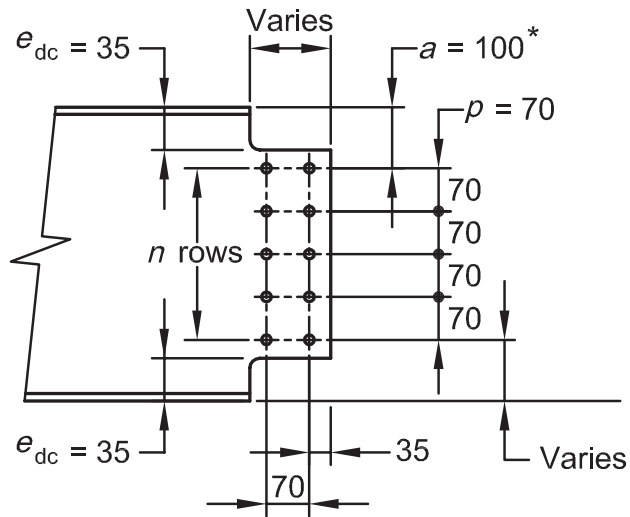
THE THREE TYPES OF SUPPORTED MEMBER (BEAM) END PREPARATION ARE SHOWN IN FIGURE 8.



(a) Square End, Uncoped



(b) Single Web Coped End, SWC



(c) Double Web Coped End, DWC

NOTE: ALL BEAM END PREPARATIONS MAY HAVE A SINGLE LINE OF BOLTS IN LIEU OF THE TWO LINES SHOWN ABOVE.

\*A = 70 WHERE NOTED IN TABLE 3.

**FIGURE 8. SUPPORTED MEMBER END PREPARATIONS**

**BOLTING LAYOUT USES THE FOLLOWING PARAMETERS:**

- (a) dimension  $a = 100\text{mm}$  from top of beam to centre of first hole, except that for beam depths less than  $240\text{mm}$   $a = 70\text{mm}$  is used;
- (b) edge distance from a coped web to a hole of  $35\text{mm}$ ;
- (c) end distance for the bolts in the beam web of  $35\text{mm}$ , so as to permit all methods of beam cutting;
- (d) all bolt holes are  $22\text{mm}$  diameter for M20 bolts;
- (e) a bolt pitch of  $70\text{mm}$ .

The bolt pitch of  $70\text{mm}$ , combined with the 'a' dimension of  $100\text{mm}$  maximises the number of bolts that can be accommodated in a beam web while still allowing sufficient clearance to enable bolts to be installed.

Using these parameters, the maximum number of bolt rows ( $n_{\text{max}}$ ) that can be accommodated on a beam web are given in Table 3 for:

- (i) Universal beam sections;
- (ii) Universal column sections down to 200UC;
- (iii) Hot rolled channel sections down to  $200\text{mm}$  deep.

**TABLE 3  
VALUES OF  $N_{\text{MAX}}$**

$A = 100$  EXCEPT  $A = 70$  WHERE \* SHOWN,  $EDC = 35$ ,  $P = 70$  (FIG. 8)

Section (UB)	$n_{\text{max}}$ on beam web	Section (UC)	$n_{\text{max}}$ on beam web	Section (Channel)	$n_{\text{max}}$ on beam web
610UB	7	310UC	3	380 x 100	4
530UB	6	250UC	2	300 x 90	3
460UB	5	200UC	2*	250 x 90	2
410UB	4			230 x 75	2*
360UB	3			200 x 75	2*
310UB	3				
250UB	2				
200UB	2*				