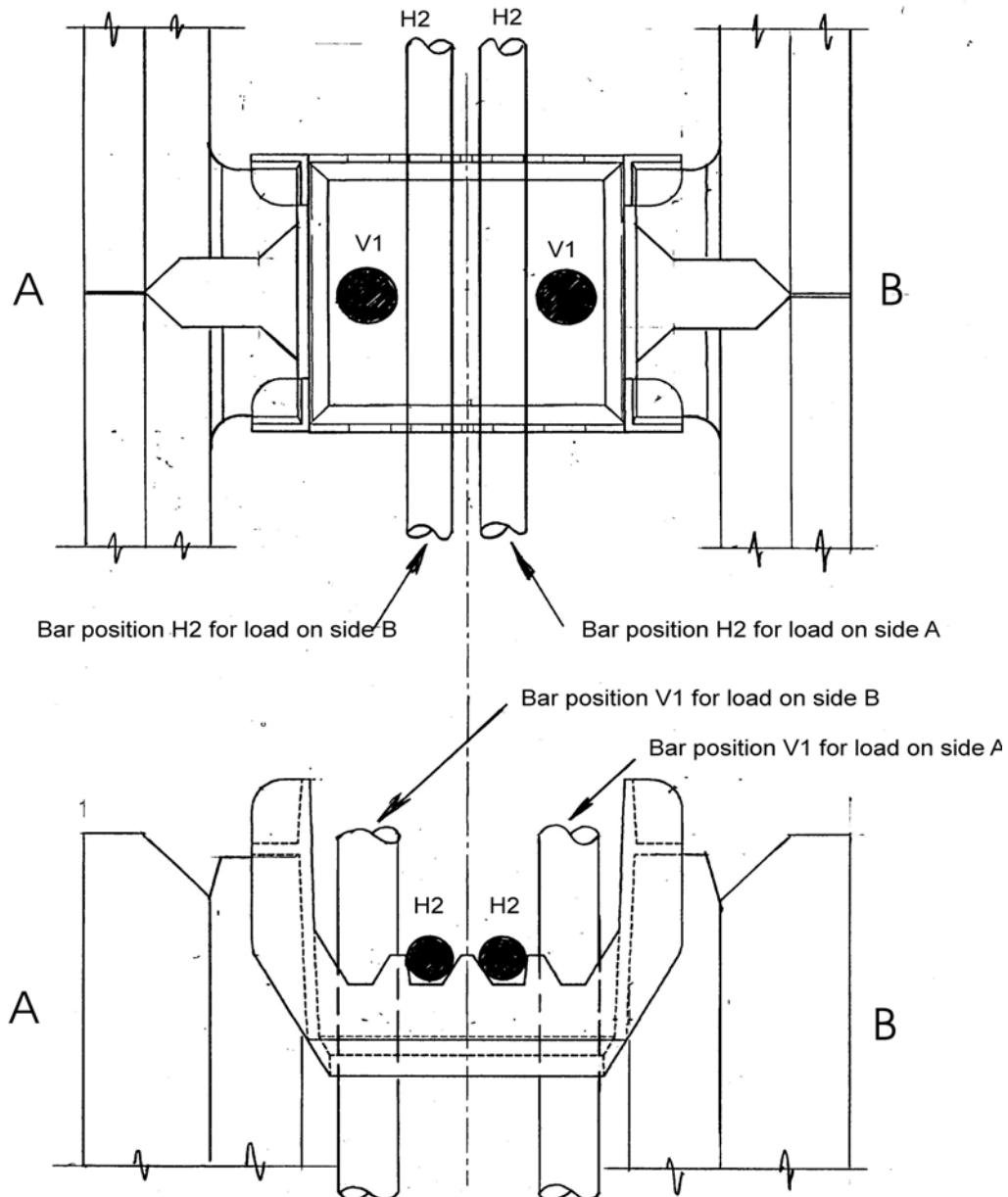
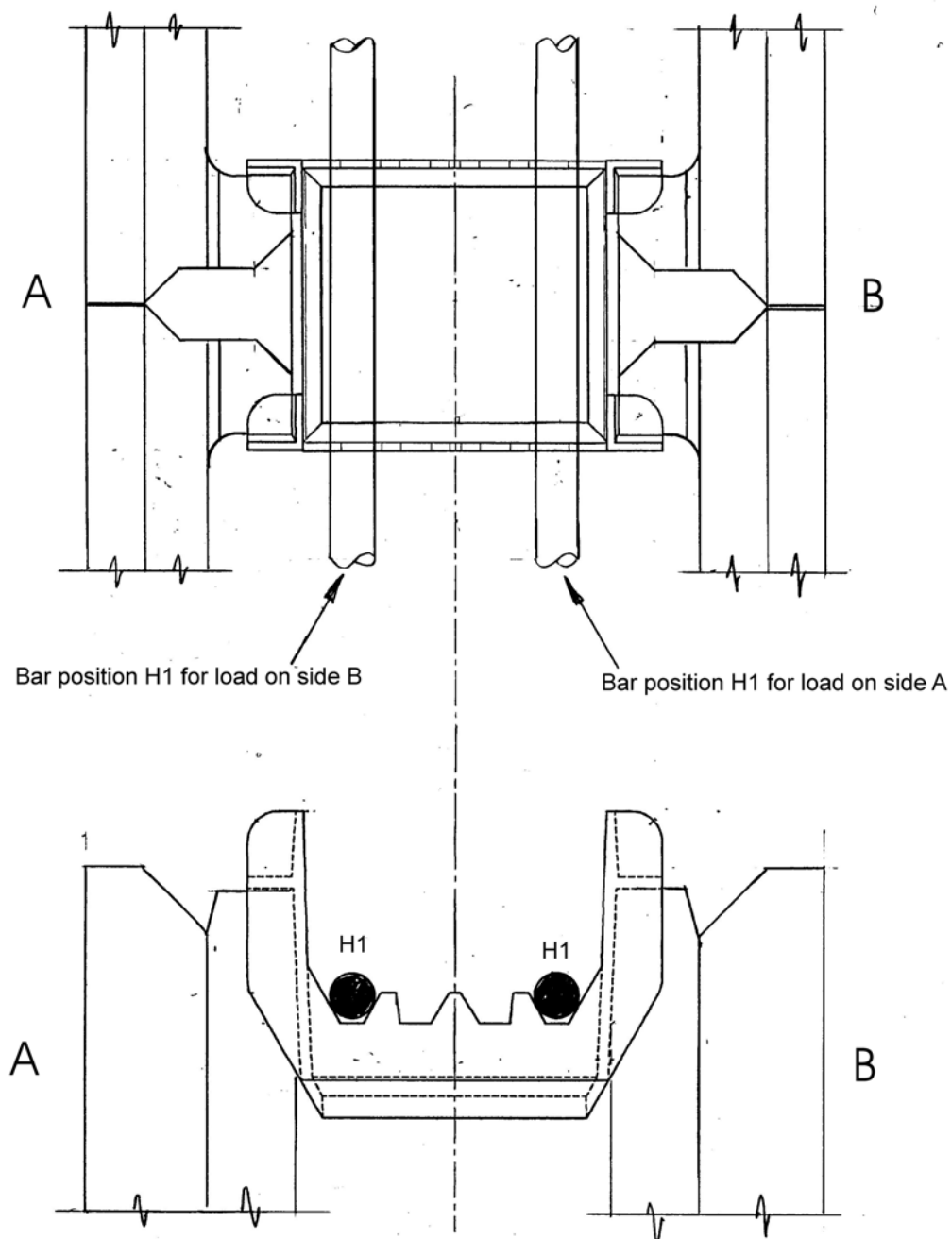


## DESIGN TABLES - WALLS IN BENDING

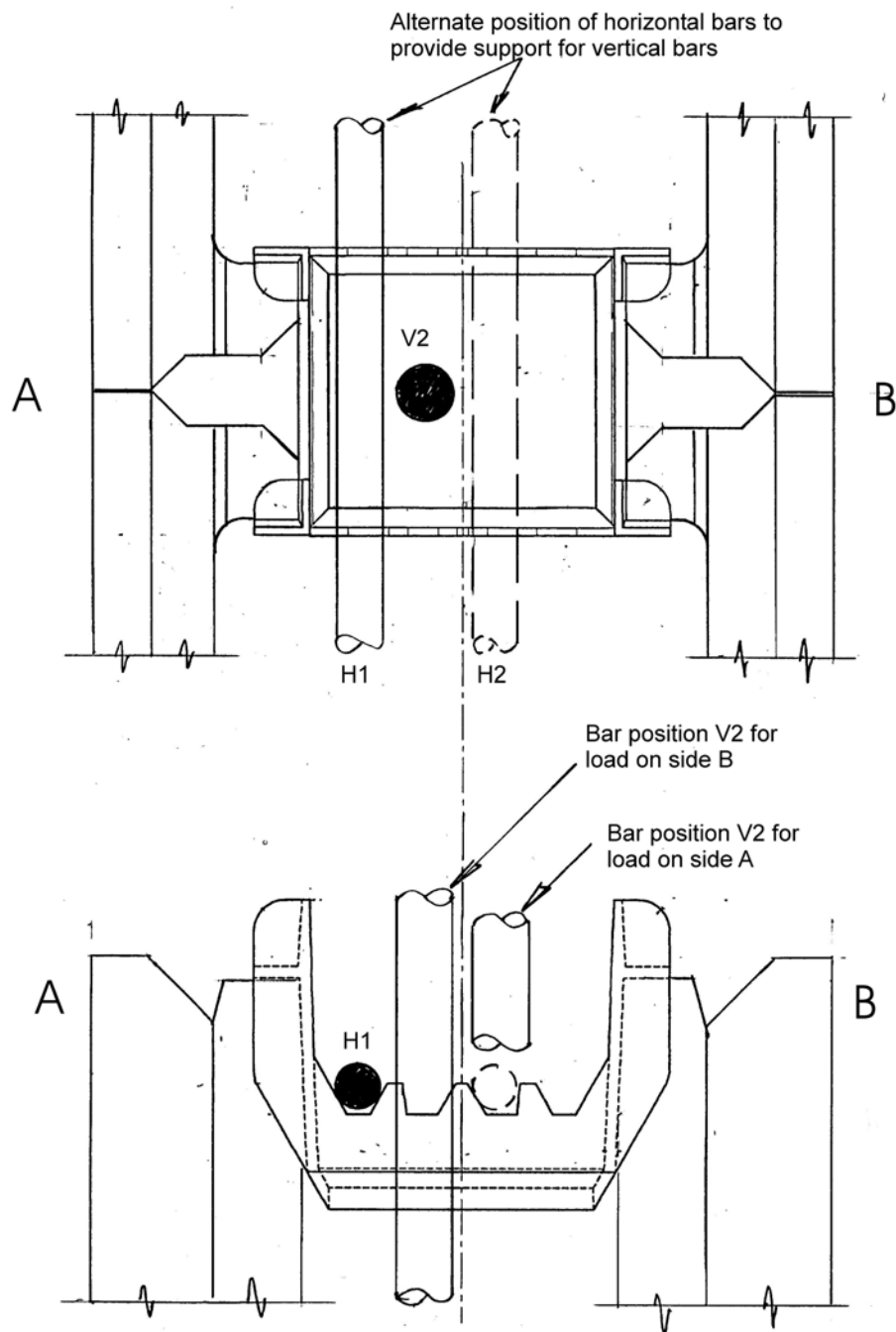
The location of all reinforcement in **mortarless** walls is controlled by the notches in the connectors that support the horizontal bars. The 200 mortarless connectors have four notches, and the bar positions are described as V1, V2, H1 and H2 as shown in the following sketches. Positions V1 and H1 are located furthest from the neutral axis, while positions V2 and H2 are located closest to the neutral axis. These positions are referred to in the moment capacity tables below.



**Reinforcing bar positions V1 and H2 for 200 mortarless**



**Reinforcing bar positions H1 for 200 mortarless**



## Reinforcing bar positions H1, H2 and V2 for 200 mortarless

**Table BR-200U:**

<b>200 MORTARLESS WALL - UNCHAMFERED BLOCKS</b>									
Block Grade & Reinforcement	Ast mm <sup>2</sup> /m	BENDING MOMENT CAPACITY M <sub>d</sub> (kNm/m)							
		vertical bending				horizontal bending			
		bars in position V1 d = 112		bars in position V2 d = 93		bars in position H1 d = 114		bars in position H2 d = 96	
<b>Grade 15 blocks</b>									
T12-200	550	*	17.1	*	12.7	*	18.7	*	13.3
T12-400	275		11.0		9.3		11.6		9.5
T12-600	183		7.8		6.6		8.2		6.8
T12-800	138		6.0		5.1		6.3		5.2
T12-1000	110		4.8		4.1		5.1		4.2
T12-1200	92		4.0		3.4		4.2		3.5
T16-200	1000	*	17.1	*	12.7				
T16-400	500		17.1	*	12.7				
T16-600	333		12.9		10.7				
T16-800	250		10.2		8.6				
<b>Grade 20 blocks</b>									
T12-200	550		19.6	*	15.7		20.8	*	16.4
T12-400	275		11.4		9.6		12.0		9.9
T12-600	183		8.0		6.8		8.4		6.9
T12-800	138		6.1		5.2		6.4		5.3
T12-1000	110		4.9		4.2		5.1		4.3
T12-1200	92		4.1		3.5		4.3		3.6
T16-200	1000	*	21.1	*	15.7				
T16-400	500		18.4		15.1				
T16-600	333		13.4		11.3				
T16-800	250		10.5		8.9				

\* indicates that M<sub>d</sub> is limited to maximum permissible as specified in BS 5628-2 Clause 8.2.4.2.1

i.e.  $M_d = (0.4 f_k b d^2) / \gamma_{mm}$  maximum