

## 2.2.2 Load tables - walls designed for compression by refined calculation:

The tables in this section are for walls designed using refined calculation where the design is based on the height or the length of the wall. Refer to Section 2.2 to determine if wall height or wall length governs the design of the wall.

### 15MPa Blocks, 20MPa Grout \*

|                          |                                                                        |
|--------------------------|------------------------------------------------------------------------|
| <b>Table 1 - 2.2.2:</b>  | 15MPa blocks, 20MPa grout, $a_v = 0.75$ , height governs               |
| <b>Table 2 - 2.2.2:</b>  | 15MPa blocks, 20MPa grout, $a_v = 0.85$ , height governs               |
| <b>Table 3 - 2.2.2:</b>  | 15MPa blocks, 20MPa grout, $a_v = 1.00$ , height governs               |
| <b>Table 4 - 2.2.2:</b>  | 15MPa blocks, 20MPa grout, $a_v = 1.50$ , height governs               |
| <b>Table 5 - 2.2.2:</b>  | 15MPa blocks, 20MPa grout, $a_v = 2.50$ , height governs               |
| <b>Table 6 - 2.2.2:</b>  | 15MPa blocks, 20MPa grout, $a_v = 0.75$ , $a_h = 1.0$ , length governs |
| <b>Table 7 - 2.2.2:</b>  | 15MPa blocks, 20MPa grout, $a_v = 0.85$ , $a_h = 1.0$ , length governs |
| <b>Table 8 - 2.2.2:</b>  | 15MPa blocks, 20MPa grout, $a_v = 1.00$ , $a_h = 1.0$ , length governs |
| <b>Table 9 - 2.2.2:</b>  | 15MPa blocks, 20MPa grout, $a_v = 1.50$ , $a_h = 1.0$ , length governs |
| <b>Table 10 - 2.2.2:</b> | 15MPa blocks, 20MPa grout, $a_v = 2.50$ , $a_h = 1.0$ , length governs |
| <b>Table 11 - 2.2.2:</b> | 15MPa blocks, 20MPa grout, $a_v = 0.75$ , $a_h = 2.5$ , length governs |
| <b>Table 12 - 2.2.2:</b> | 15MPa blocks, 20MPa grout, $a_v = 0.85$ , $a_h = 2.5$ , length governs |
| <b>Table 13 - 2.2.2:</b> | 15MPa blocks, 20MPa grout, $a_v = 1.00$ , $a_h = 2.5$ , length governs |
| <b>Table 14 - 2.2.2:</b> | 15MPa blocks, 20MPa grout, $a_v = 1.50$ , $a_h = 2.5$ , length governs |
| <b>Table 14 - 2.2.2:</b> | 15MPa blocks, 20MPa grout, $a_v = 2.50$ , $a_h = 2.5$ , length governs |

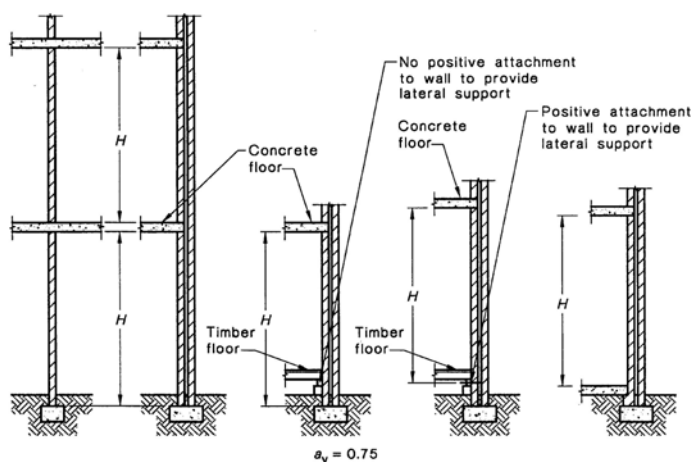
\* Note: The design loads given in the tables in this section also apply to walls constructed with 15Mpa blocks and 25Mpa grout.

### 140 MORTARLESS WALL (unchamfered blocks)

**Wall span: VERTICAL (reinforced vertically)**

$$a_v = 0.75$$

|          |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |           |     |     |           |     |     |           |     |     |           |     |     |                 |
|----------|-------|-----------------------------------------------------|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------------|
| $H$ (mm) | $S_r$ | Eccentricity $e_1$                                  |           |     |     |           |     |     |           |     |     |           |     |     |                 |
|          |       | $\leq 5.7$<br>mm                                    | 10mm      |     |     | 20mm      |     |     | 30mm      |     |     | 40mm      |     |     | $\geq 57$<br>mm |
|          |       |                                                     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     |                 |
|          |       |                                                     | 1         | 0   | -1  | 1         | 0   | -1  | 1         | 0   | -1  | 1         | 0   | -1  |                 |
| 2000     | 10.7  | 301                                                 | 238       | 262 | 285 | 182       | 225 | 269 | 125       | 189 | 253 | 68        | 153 | 237 | 0               |
| 2400     | 12.9  | 278                                                 | 217       | 240 | 263 | 163       | 206 | 249 | 110       | 172 | 234 | 56        | 138 | 219 | 0               |
| 2800     | 15.0  | 256                                                 | 195       | 219 | 242 | 145       | 187 | 229 | 94        | 155 | 215 | 44        | 123 | 202 | 0               |
| 3200     | 17.1  | 233                                                 | 173       | 197 | 221 | 126       | 167 | 208 | 79        | 138 | 196 | 32        | 108 | 184 | 0               |
| 3600     | 19.3  | 211                                                 | 152       | 176 | 199 | 108       | 148 | 188 | 64        | 121 | 177 | 20        | 93  | 166 | 0               |
| 4000     | 21.4  | 188                                                 | 130       | 154 | 178 | 89        | 129 | 168 | 49        | 103 | 158 | 8         | 78  | 148 | 0               |
| 4400     | 23.6  | 166                                                 | 108       | 133 | 157 | 71        | 109 | 148 | 33        | 86  | 139 | 0         | 63  | 131 | 0               |
| 4800     | 25.7  | 143                                                 | 87        | 111 | 135 | 52        | 90  | 128 | 18        | 69  | 120 | 0         | 48  | 113 | 0               |
| 5200     | 27.9  | 121                                                 | 65        | 90  | 114 | 34        | 71  | 108 | 3         | 52  | 101 | 0         | 34  | 95  | 0               |
| 5600     | 30.0  | 98                                                  | 43        | 68  | 93  | 15        | 52  | 88  | 0         | 35  | 83  | 0         | 19  | 77  | 0               |
| 6000     | 32.1  | 76                                                  | 21        | 46  | 72  | 0         | 32  | 68  | 0         | 18  | 64  | 0         | 4   | 60  | 0               |
| 6400     | 34.3  | 53                                                  | 0         | 25  | 50  | 0         | 13  | 47  | 0         | 1   | 45  | 0         | 0   | 42  | 0               |
| 6800     | 36.4  | 30                                                  | 0         | 3   | 29  | 0         | 0   | 27  | 0         | 0   | 26  | 0         | 0   | 24  | 0               |

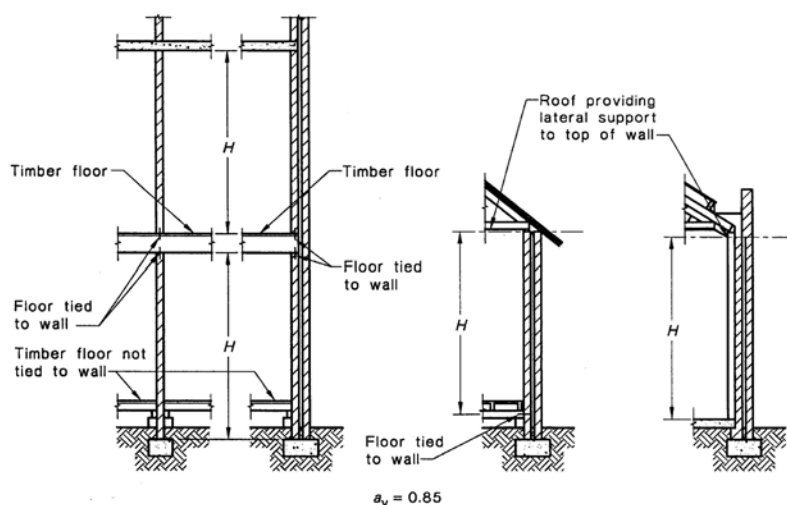


**Lateral support top and bottom**  
**Partial rotational restraint top and bottom**  
**Fully braced construction**

Table 2 - 2.2.2:

**140 MORTARLESS WALL (unchamfered blocks)****Block: 15MPa****Wall span: VERTICAL****(reinforced vertically)****Grout: 20MPa** **$a_v = 0.85$** 

|          |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |           |     |     |           |     |     |           |     |     |           |     |     |                 |
|----------|-------|-----------------------------------------------------|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------------|
| $H$ (mm) | $S_r$ | Eccentricity $e_1$                                  |           |     |     |           |     |     |           |     |     |           |     |     |                 |
|          |       | $\leq 5.7$<br>mm                                    | 10mm      |     |     | 20mm      |     |     | 30mm      |     |     | 40mm      |     |     | $\geq 57$<br>mm |
|          |       |                                                     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     |                 |
|          |       |                                                     | 1         | 0   | -1  | 1         | 0   | -1  | 1         | 0   | -1  | 1         | 0   | -1  |                 |
| 2000     | 12.1  | 286                                                 | 224       | 247 | 270 | 169       | 212 | 255 | 115       | 177 | 240 | 60        | 143 | 225 | 0               |
| 2400     | 14.6  | 260                                                 | 199       | 223 | 246 | 148       | 191 | 233 | 97        | 158 | 219 | 46        | 126 | 205 | 0               |
| 2800     | 17.0  | 235                                                 | 175       | 198 | 222 | 127       | 169 | 210 | 80        | 139 | 197 | 33        | 109 | 185 | 0               |
| 3200     | 19.4  | 209                                                 | 150       | 174 | 198 | 107       | 147 | 187 | 63        | 119 | 176 | 19        | 92  | 165 | 0               |
| 3600     | 21.9  | 184                                                 | 126       | 150 | 174 | 86        | 125 | 164 | 46        | 100 | 155 | 6         | 75  | 145 | 0               |
| 4000     | 24.3  | 158                                                 | 101       | 125 | 150 | 65        | 103 | 141 | 28        | 81  | 133 | 0         | 58  | 125 | 0               |
| 4400     | 26.7  | 133                                                 | 76        | 101 | 126 | 44        | 81  | 119 | 11        | 61  | 112 | 0         | 41  | 105 | 0               |
| 4800     | 29.1  | 107                                                 | 52        | 77  | 101 | 23        | 59  | 96  | 0         | 42  | 90  | 0         | 25  | 84  | 0               |
| 5200     | 31.6  | 82                                                  | 27        | 52  | 77  | 2         | 37  | 73  | 0         | 23  | 69  | 0         | 8   | 64  | 0               |
| 5600     | 34.0  | 56                                                  | 3         | 28  | 53  | 0         | 16  | 50  | 0         | 3   | 47  | 0         | 0   | 44  | 0               |
| 6000     | 36.4  | 30                                                  | 0         | 3   | 29  | 0         | 0   | 27  | 0         | 0   | 26  | 0         | 0   | 24  | 0               |

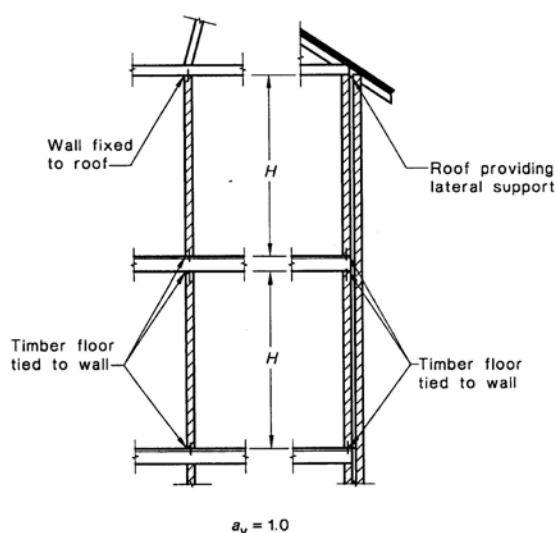


**Lateral support top and bottom  
Partial rotational support one end  
Fully braced construction**

Table 3 - 2.2.2:

**140 MORTARLESS WALL (unchamfered blocks)****Block: 15MPa****Wall span: VERTICAL****(reinforced vertically)****Grout: 20MPa** **$a_v = 1.00$** 

|          |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |           |     |     |           |     |     |           |     |     |           |     |     |                 |
|----------|-------|-----------------------------------------------------|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------------|
| $H$ (mm) | $S_r$ | Eccentricity $e_1$                                  |           |     |     |           |     |     |           |     |     |           |     |     |                 |
|          |       | $\leq 5.7$<br>mm                                    | 10mm      |     |     | 20mm      |     |     | 30mm      |     |     | 40mm      |     |     | $\geq 57$<br>mm |
|          |       |                                                     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     |                 |
|          |       |                                                     | 1         | 0   | -1  | 1         | 0   | -1  | 1         | 0   | -1  | 1         | 0   | -1  |                 |
| 2000     | 14.3  | 263                                                 | 202       | 226 | 249 | 151       | 193 | 235 | 99        | 160 | 221 | 48        | 128 | 208 | 0               |
| 2400     | 17.1  | 233                                                 | 173       | 197 | 221 | 126       | 167 | 208 | 79        | 138 | 196 | 32        | 108 | 184 | 0               |
| 2800     | 20.0  | 203                                                 | 144       | 168 | 192 | 102       | 142 | 182 | 59        | 115 | 171 | 16        | 88  | 160 | 0               |
| 3200     | 22.9  | 173                                                 | 116       | 140 | 164 | 77        | 116 | 155 | 38        | 92  | 146 | 0         | 68  | 137 | 0               |
| 3600     | 25.7  | 143                                                 | 87        | 111 | 135 | 52        | 90  | 128 | 18        | 69  | 120 | 0         | 48  | 113 | 0               |
| 4000     | 28.6  | 113                                                 | 58        | 82  | 107 | 28        | 64  | 101 | 0         | 47  | 95  | 0         | 29  | 89  | 0               |
| 4400     | 31.4  | 83                                                  | 29        | 54  | 79  | 3         | 39  | 74  | 0         | 24  | 70  | 0         | 9   | 66  | 0               |
| 4800     | 34.3  | 53                                                  | 0         | 25  | 50  | 0         | 13  | 47  | 0         | 1   | 45  | 0         | 0   | 42  | 0               |
| 5000     | 35.7  | 38                                                  | 0         | 11  | 36  | 0         | 0   | 34  | 0         | 0   | 32  | 0         | 0   | 30  | 0               |



**Lateral support top and bottom  
Fully braced construction**

Table 4 - 2.2.2:

| 140 MORTARLESS WALL (unchamfered blocks) |       |                    |                                                     |     |     |           |     |     |           |     |     |           |    |     |                 |
|------------------------------------------|-------|--------------------|-----------------------------------------------------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------|----|-----|-----------------|
| Block: 15MPa                             |       |                    | Wall span: VERTICAL (reinforced vertically)         |     |     |           |     |     |           |     |     |           |    |     |                 |
| Grout: 20MPa                             |       |                    | $a_v = 1.50$                                        |     |     |           |     |     |           |     |     |           |    |     |                 |
|                                          |       |                    | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |     |     |           |     |     |           |     |     |           |    |     |                 |
| $H$ (mm)                                 | $S_r$ | Eccentricity $e_1$ |                                                     |     |     |           |     |     |           |     |     |           |    |     |                 |
|                                          |       | $\leq 5.7$<br>mm   | 10mm                                                |     |     | 20mm      |     |     | 30mm      |     |     | 40mm      |    |     | $\geq 57$<br>mm |
|                                          |       |                    | $e_2/e_1$                                           |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |    |     |                 |
|                                          |       |                    | 1                                                   | 0   | -1  | 1         | 0   | -1  | 1         | 0   | -1  | 1         | 0  | -1  |                 |
| 2000                                     | 21.4  | 188                | 130                                                 | 154 | 178 | 89        | 129 | 168 | 49        | 103 | 158 | 8         | 78 | 148 | 0               |
| 2400                                     | 25.7  | 143                | 87                                                  | 111 | 135 | 52        | 90  | 128 | 18        | 69  | 120 | 0         | 48 | 113 | 0               |
| 2800                                     | 30.0  | 98                 | 43                                                  | 68  | 93  | 15        | 52  | 88  | 0         | 35  | 83  | 0         | 19 | 77  | 0               |
| 3200                                     | 34.3  | 53                 | 0                                                   | 25  | 50  | 0         | 13  | 47  | 0         | 1   | 45  | 0         | 0  | 42  | 0               |
| 3400                                     | 36.4  | 30                 | 0                                                   | 3   | 29  | 0         | 0   | 27  | 0         | 0   | 26  | 0         | 0  | 24  | 0               |

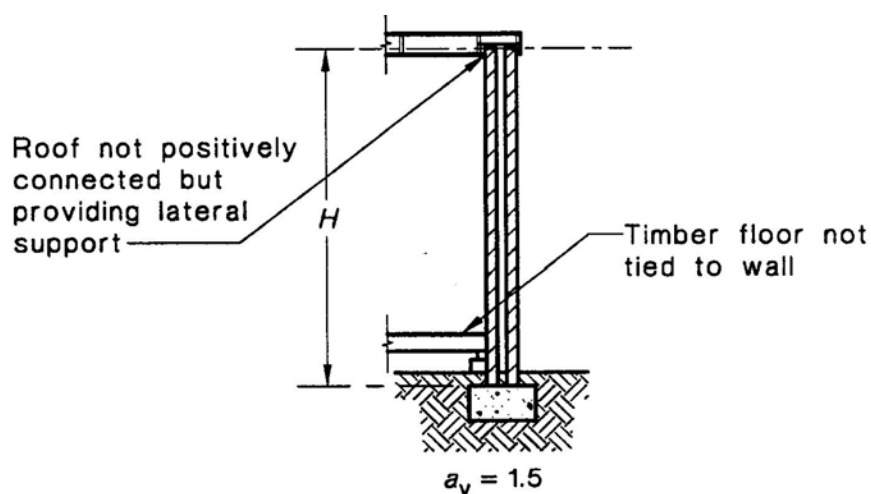
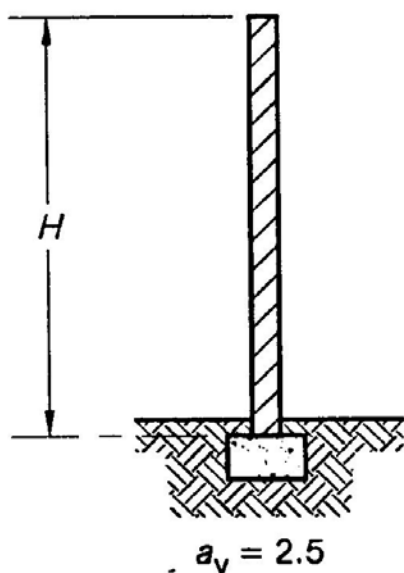


Table 5 - 2.2.2:

| 140 MORTARLESS WALL (unchamfered blocks) |       |                    |                                                     |     |     |           |     |     |           |     |     |           |     |     |                 |
|------------------------------------------|-------|--------------------|-----------------------------------------------------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------------|
| Block: 15MPa                             |       |                    | Wall span: VERTICAL (reinforced vertically)         |     |     |           |     |     |           |     |     |           |     |     |                 |
| Grout: 20MPa                             |       |                    | $a_v = 2.50$                                        |     |     |           |     |     |           |     |     |           |     |     |                 |
|                                          |       |                    | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |     |     |           |     |     |           |     |     |           |     |     |                 |
| $H$ (mm)                                 | $S_r$ | Eccentricity $e_1$ |                                                     |     |     |           |     |     |           |     |     |           |     |     |                 |
|                                          |       | $\leq 5.7$<br>mm   | 10mm                                                |     |     | 20mm      |     |     | 30mm      |     |     | 40mm      |     |     | $\geq 57$<br>mm |
|                                          |       |                    | $e_2/e_1$                                           |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     | $e_2/e_1$ |     |     |                 |
|                                          |       |                    | 1                                                   | 0   | -1  | 1         | 0   | -1  | 1         | 0   | -1  | 1         | 0   | -1  |                 |
| 1000                                     | 17.9  | 226                | 166                                                 | 190 | 214 | 120       | 161 | 202 | 74        | 132 | 190 | 28        | 103 | 178 | 0               |
| 1200                                     | 21.4  | 188                | 130                                                 | 154 | 178 | 89        | 129 | 168 | 49        | 103 | 158 | 8         | 78  | 148 | 0               |
| 1400                                     | 25.0  | 151                | 94                                                  | 118 | 143 | 59        | 97  | 135 | 23        | 75  | 127 | 0         | 53  | 119 | 0               |
| 1600                                     | 28.6  | 0                  | 58                                                  | 82  | 107 | 28        | 64  | 101 | 0         | 47  | 95  | 0         | 29  | 89  | 0               |
| 1800                                     | 32.1  | 0                  | 21                                                  | 46  | 72  | 0         | 32  | 68  | 0         | 18  | 64  | 0         | 4   | 60  | 0               |
| 2000                                     | 35.7  | 0                  | 0                                                   | 11  | 36  | 0         | 0   | 34  | 0         | 0   | 32  | 0         | 0   | 30  | 0               |



Free standing wall  
No lateral support to top edge

Table 6 - 2.2.2:

**140 MORTARLESS WALL (unchamfered blocks)****Block: 15MPa****Wall Span: HORIZONTAL** (reinforced vertically & horizontally)**Grout: 20MPa** **$a_v = 0.75$**  **$a_h = 1.0$** 

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 2000                        | 8.7   | 322                                                 | 259  | 199  | 139  | 79   | 0                  |
| 2400                        | 10.4  | 304                                                 | 242  | 184  | 127  | 70   | 0                  |
| 2800                        | 12.1  | 286                                                 | 224  | 169  | 115  | 60   | 0                  |
| 3200                        | 13.9  | 268                                                 | 207  | 155  | 102  | 50   | 0                  |
| 3600                        | 15.6  | 249                                                 | 189  | 140  | 90   | 41   | 0                  |
| 4000                        | 17.3  | 231                                                 | 172  | 125  | 78   | 31   | 0                  |
| 4400                        | 19.1  | 213                                                 | 154  | 110  | 65   | 21   | 0                  |
| 4800                        | 20.8  | 195                                                 | 136  | 95   | 53   | 12   | 0                  |
| 5200                        | 22.5  | 177                                                 | 119  | 80   | 41   | 2    | 0                  |
| 5600                        | 24.2  | 158                                                 | 101  | 65   | 29   | 0    | 0                  |
| 6000                        | 26.0  | 140                                                 | 84   | 50   | 16   | 0    | 0                  |
| 6400                        | 27.7  | 122                                                 | 66   | 35   | 4    | 0    | 0                  |
| 6800                        | 29.4  | 104                                                 | 49   | 20   | 0    | 0    | 0                  |
| 7200                        | 31.2  | 86                                                  | 31   | 5    | 0    | 0    | 0                  |
| 7600                        | 32.9  | 67                                                  | 14   | 0    | 0    | 0    | 0                  |
| 8000                        | 34.6  | 49                                                  | 0    | 0    | 0    | 0    | 0                  |
| 8400                        | 36.4  | 31                                                  | 0    | 0    | 0    | 0    | 0                  |

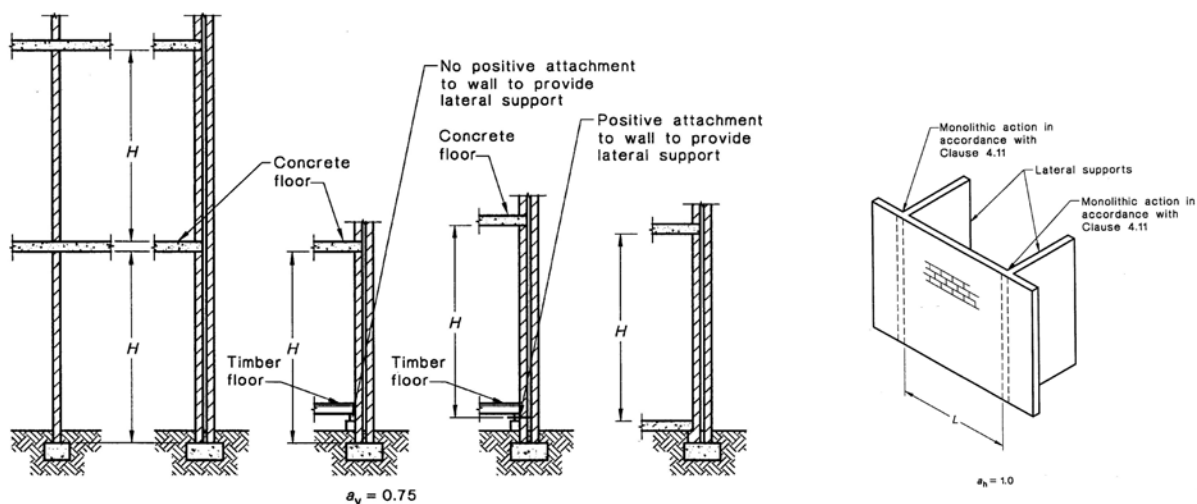


Table 7 - 2.2.2:

**140 MORTARLESS WALL (unchamfered blocks)****Block: 15MPa****Wall Span: HORIZONTAL** (reinforced vertically & horizontally)**Grout: 20MPa** **$a_v = 0.85$**  **$a_h = 1.0$** 

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 2000                        | 9.2   | 316                                                 | 254  | 195  | 135  | 76   | 0                  |
| 2400                        | 11.1  | 297                                                 | 235  | 179  | 122  | 66   | 0                  |
| 2800                        | 12.9  | 277                                                 | 216  | 163  | 109  | 56   | 0                  |
| 3200                        | 14.8  | 258                                                 | 198  | 147  | 96   | 45   | 0                  |
| 3600                        | 16.6  | 239                                                 | 179  | 131  | 83   | 35   | 0                  |
| 4000                        | 18.4  | 219                                                 | 160  | 115  | 70   | 25   | 0                  |
| 4400                        | 20.3  | 200                                                 | 142  | 99   | 57   | 14   | 0                  |
| 4800                        | 22.1  | 181                                                 | 123  | 83   | 44   | 4    | 0                  |
| 5200                        | 24.0  | 161                                                 | 104  | 67   | 31   | 0    | 0                  |
| 5600                        | 25.8  | 142                                                 | 86   | 52   | 17   | 0    | 0                  |
| 6000                        | 27.7  | 123                                                 | 67   | 36   | 4    | 0    | 0                  |
| 6400                        | 29.5  | 103                                                 | 48   | 20   | 0    | 0    | 0                  |
| 6800                        | 31.3  | 84                                                  | 30   | 4    | 0    | 0    | 0                  |
| 7200                        | 33.2  | 65                                                  | 11   | 0    | 0    | 0    | 0                  |
| 7600                        | 35.0  | 45                                                  | 0    | 0    | 0    | 0    | 0                  |
| 7800                        | 36.0  | 35                                                  | 0    | 0    | 0    | 0    | 0                  |

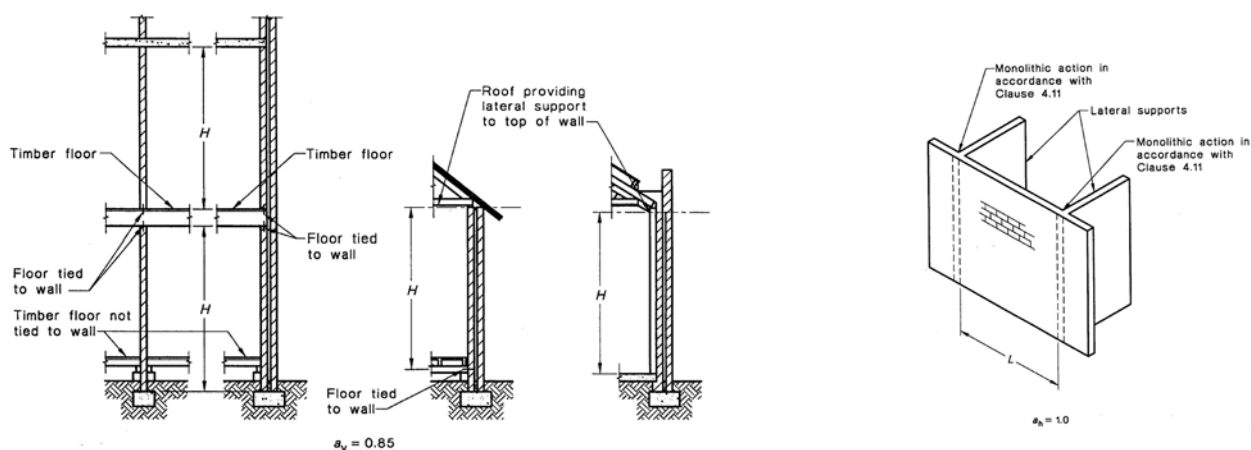




Table 8 - 2.2.2:

# 140 MORTARLESS WALL (unchamfered blocks)

Block: 15MPa

Wall Span: HORIZONTAL (reinforced vertically &amp; horizontally)

Grout: 20MPa

 $a_v = 1.00$ 
 $a_h = 1.0$ 

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 2000                        | 10.0  | 308                                                 | 246  | 188  | 130  | 72   | 0                  |
| 2400                        | 12.0  | 287                                                 | 225  | 171  | 116  | 61   | 0                  |
| 2800                        | 14.0  | 266                                                 | 205  | 153  | 101  | 50   | 0                  |
| 3200                        | 16.0  | 245                                                 | 185  | 136  | 87   | 38   | 0                  |
| 3600                        | 18.0  | 224                                                 | 165  | 119  | 73   | 27   | 0                  |
| 4000                        | 20.0  | 203                                                 | 144  | 102  | 59   | 16   | 0                  |
| 4400                        | 22.0  | 182                                                 | 124  | 84   | 45   | 5    | 0                  |
| 4800                        | 24.0  | 161                                                 | 104  | 67   | 30   | 0    | 0                  |
| 5200                        | 26.0  | 140                                                 | 84   | 50   | 16   | 0    | 0                  |
| 5600                        | 28.0  | 119                                                 | 63   | 33   | 2    | 0    | 0                  |
| 6000                        | 30.0  | 98                                                  | 43   | 15   | 0    | 0    | 0                  |
| 6400                        | 32.0  | 77                                                  | 23   | 0    | 0    | 0    | 0                  |
| 6800                        | 34.0  | 56                                                  | 3    | 0    | 0    | 0    | 0                  |
| 7200                        | 36.0  | 35                                                  | 0    | 0    | 0    | 0    | 0                  |

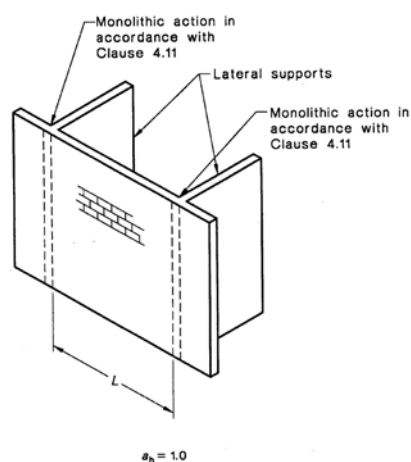
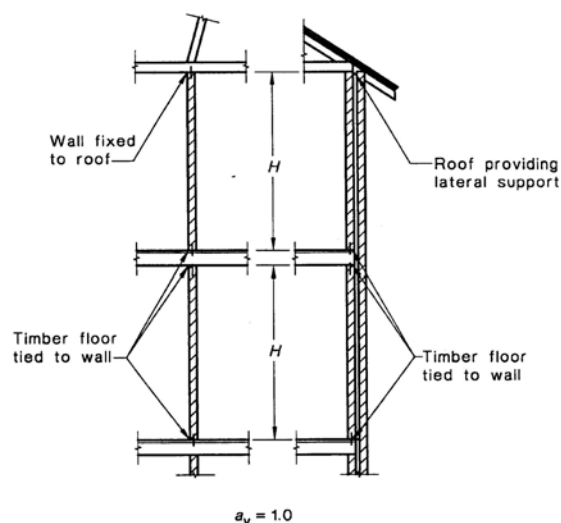


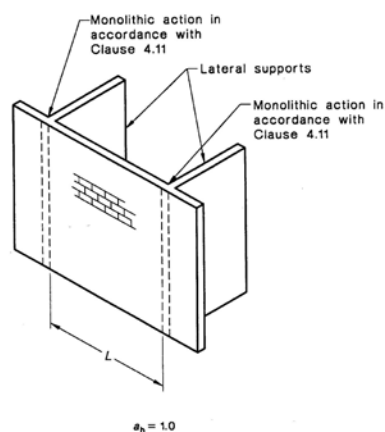
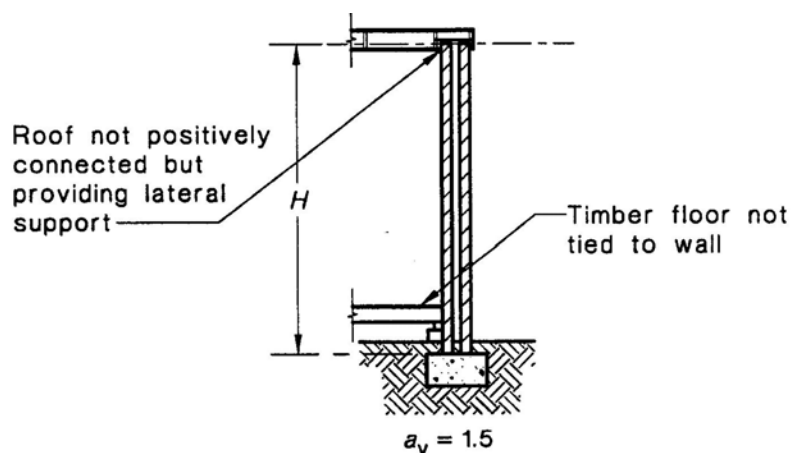
Table 9 - 2.2.2:

# 140 MORTARLESS WALL (unchamfered blocks)

Block: 15MPa Wall Span: HORIZONTAL (reinforced vertically & horizontally)

Grout: 20MPa  $a_v = 1.50$   $a_h = 1.0$

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 1200                        | 7.3   | 350                                                 | 273  | 211  | 149  | 87   | 0                  |
| 1600                        | 9.8   | 310                                                 | 248  | 190  | 131  | 73   | 0                  |
| 2000                        | 12.2  | 284                                                 | 223  | 168  | 114  | 59   | 0                  |
| 2400                        | 14.7  | 259                                                 | 198  | 147  | 96   | 46   | 0                  |
| 2800                        | 17.1  | 233                                                 | 173  | 126  | 79   | 32   | 0                  |
| 3200                        | 19.6  | 207                                                 | 149  | 105  | 62   | 18   | 0                  |
| 3600                        | 22.0  | 182                                                 | 124  | 84   | 44   | 5    | 0                  |
| 4000                        | 24.5  | 156                                                 | 99   | 63   | 27   | 0    | 0                  |
| 4400                        | 26.9  | 130                                                 | 74   | 42   | 9    | 0    | 0                  |
| 4800                        | 29.4  | 104                                                 | 49   | 21   | 0    | 0    | 0                  |
| 5200                        | 31.8  | 79                                                  | 24   | 0    | 0    | 0    | 0                  |
| 5600                        | 34.3  | 53                                                  | 0    | 0    | 0    | 0    | 0                  |
| 6000                        | 36.7  | 27                                                  | 0    | 0    | 0    | 0    | 0                  |



**Table 10 - 2.2.2:**

140 MORTARLESS WALL (unchamfered blocks)

Block: 15MPa

Wall Span: HORIZONTAL (reinforced vertically & horizontally)

Grout: 20MPa

$a_v = 2.50$

$a_h = 1.0$

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 1200                        | 9.5   | 313                                                 | 251  | 192  | 133  | 75   | 0                  |
| 1600                        | 12.6  | 280                                                 | 219  | 165  | 111  | 57   | 0                  |
| 2000                        | 15.8  | 247                                                 | 187  | 138  | 89   | 39   | 0                  |
| 2400                        | 19.0  | 214                                                 | 155  | 110  | 66   | 22   | 0                  |
| 2800                        | 22.1  | 181                                                 | 123  | 83   | 44   | 4    | 0                  |
| 3200                        | 25.3  | 147                                                 | 91   | 56   | 21   | 0    | 0                  |
| 3600                        | 28.5  | 114                                                 | 59   | 29   | 0    | 0    | 0                  |
| 4000                        | 31.6  | 81                                                  | 27   | 1    | 0    | 0    | 0                  |
| 4400                        | 34.8  | 48                                                  | 0    | 0    | 0    | 0    | 0                  |
| 4600                        | 36.4  | 31                                                  | 0    | 0    | 0    | 0    | 0                  |

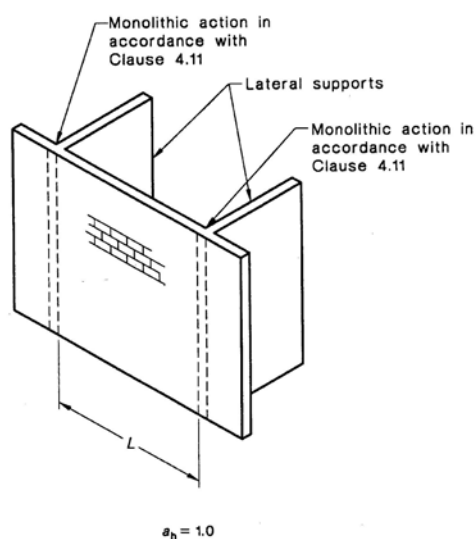
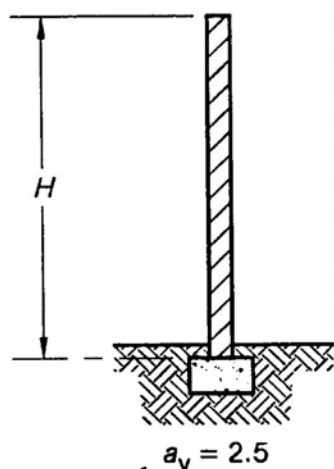


Table 11 - 2.2.2:

# 140 MORTARLESS WALL (unchamfered blocks)

Block: 15MPa

Wall Span: HORIZONTAL (reinforced vertically &amp; horizontally)

Grout: 20MPa

 $a_v = 0.75$ 
 $a_h = 2.5$ 

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 2000                        | 13.7  | 269                                                 | 208  | 156  | 104  | 51   | 0                  |
| 2400                        | 16.4  | 240                                                 | 181  | 132  | 84   | 36   | 0                  |
| 2800                        | 19.2  | 212                                                 | 153  | 109  | 65   | 21   | 0                  |
| 3200                        | 21.9  | 183                                                 | 125  | 85   | 45   | 5    | 0                  |
| 3600                        | 24.6  | 154                                                 | 97   | 62   | 26   | 0    | 0                  |
| 4000                        | 27.4  | 125                                                 | 70   | 38   | 6    | 0    | 0                  |
| 4400                        | 30.1  | 97                                                  | 42   | 14   | 0    | 0    | 0                  |
| 4800                        | 32.9  | 68                                                  | 14   | 0    | 0    | 0    | 0                  |
| 5200                        | 35.6  | 39                                                  | 0    | 0    | 0    | 0    | 0                  |

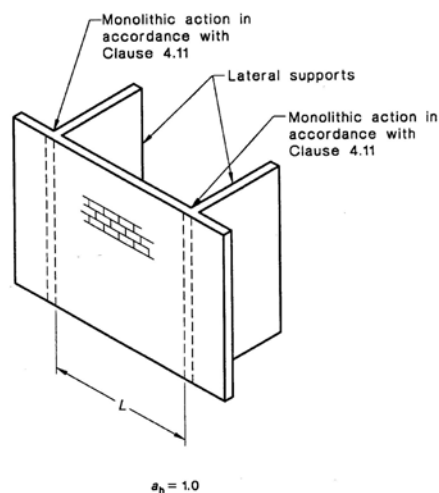
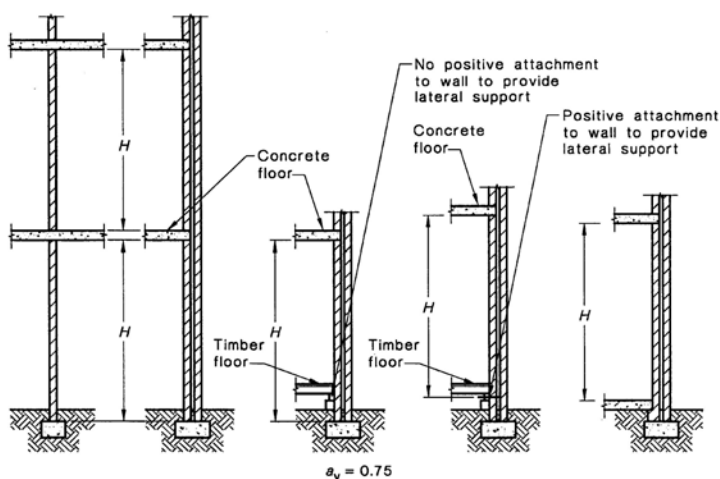


Table 12 - 2.2.2:

**140 MORTARLESS WALL (unchamfered blocks)****Block: 15MPa****Wall Span: HORIZONTAL** (reinforced vertically & horizontally)**Grout: 20MPa** **$a_v = 0.85$**  **$a_h = 2.5$** 

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 2000                        | 14.6  | 260                                                 | 199  | 148  | 97   | 46   | 0                  |
| 2400                        | 17.5  | 229                                                 | 170  | 123  | 77   | 30   | 0                  |
| 2800                        | 20.4  | 199                                                 | 140  | 98   | 56   | 14   | 0                  |
| 3200                        | 23.3  | 168                                                 | 111  | 73   | 35   | 0    | 0                  |
| 3600                        | 26.2  | 137                                                 | 81   | 48   | 14   | 0    | 0                  |
| 4000                        | 29.2  | 107                                                 | 52   | 23   | 0    | 0    | 0                  |
| 4400                        | 32.1  | 76                                                  | 22   | 0    | 0    | 0    | 0                  |
| 4800                        | 35.0  | 46                                                  | 0    | 0    | 0    | 0    | 0                  |
| 5000                        | 36.4  | 30                                                  | 0    | 0    | 0    | 0    | 0                  |

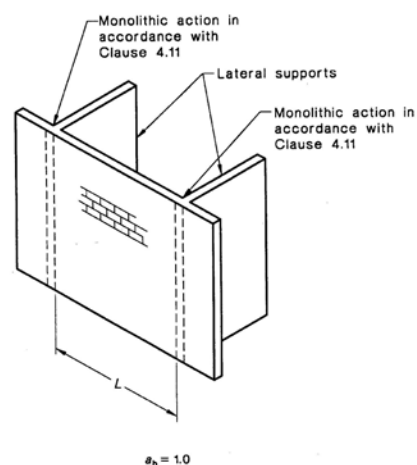
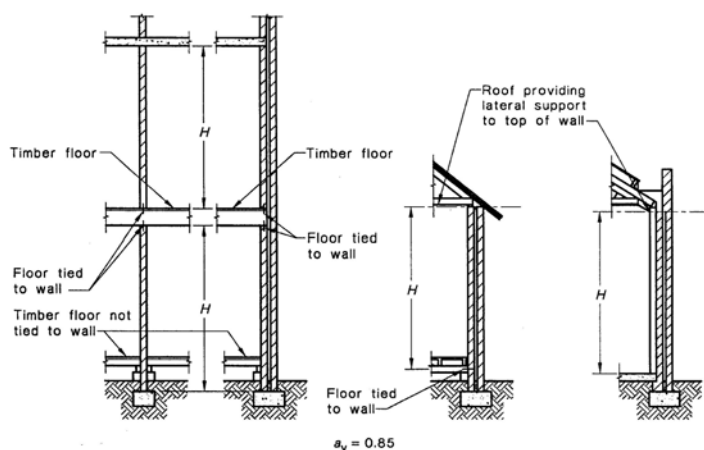


Table 13 - 2.2.2:

**140 MORTARLESS WALL (unchamfered blocks)****Block: 15MPa****Wall Span: HORIZONTAL** (reinforced vertically & horizontally)**Grout: 20MPa** **$a_v = 1.00$**  **$a_h = 2.5$** 

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 2000                        | 15.8  | 247                                                 | 187  | 138  | 89   | 39   | 0                  |
| 2400                        | 19.0  | 214                                                 | 155  | 110  | 66   | 22   | 0                  |
| 2800                        | 22.1  | 181                                                 | 123  | 83   | 44   | 4    | 0                  |
| 3200                        | 25.3  | 147                                                 | 91   | 56   | 21   | 0    | 0                  |
| 3600                        | 28.5  | 114                                                 | 59   | 29   | 0    | 0    | 0                  |
| 4000                        | 31.6  | 81                                                  | 27   | 1    | 0    | 0    | 0                  |
| 4400                        | 34.8  | 48                                                  | 0    | 0    | 0    | 0    | 0                  |
| 4600                        | 36.4  | 31                                                  | 0    | 0    | 0    | 0    | 0                  |

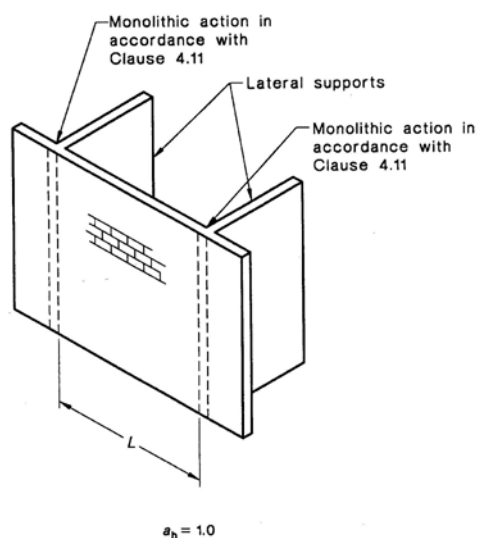
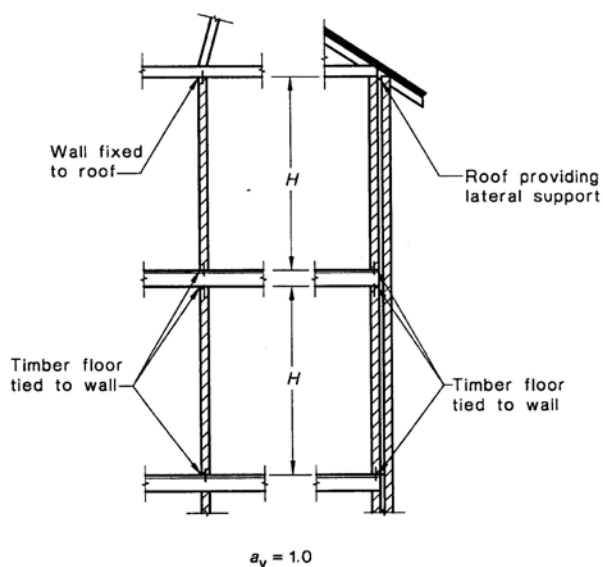


Table 14 - 2.2.2:

# 140 MORTARLESS WALL (unchamfered blocks)

Block: 15MPa      Wall Span: HORIZONTAL (reinforced vertically & horizontally)

Grout: 20MPa       $a_v = 1.50$        $a_h = 2.5$

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 1200                        | 11.6  | 291                                                 | 229  | 174  | 118  | 63   | 0                  |
| 1600                        | 15.5  | 250                                                 | 190  | 140  | 91   | 41   | 0                  |
| 2000                        | 19.4  | 210                                                 | 151  | 107  | 63   | 20   | 0                  |
| 2400                        | 23.2  | 169                                                 | 112  | 74   | 36   | 0    | 0                  |
| 2800                        | 27.1  | 128                                                 | 72   | 40   | 8    | 0    | 0                  |
| 3200                        | 31.0  | 88                                                  | 33   | 7    | 0    | 0    | 0                  |
| 3600                        | 34.9  | 47                                                  | 0    | 0    | 0    | 0    | 0                  |
| 3800                        | 36.8  | 27                                                  | 0    | 0    | 0    | 0    | 0                  |

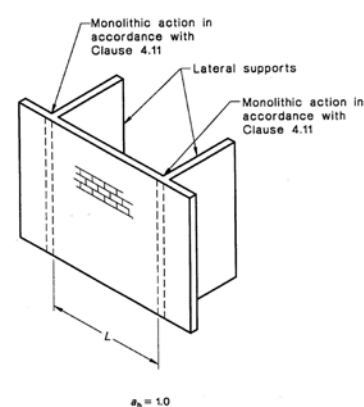
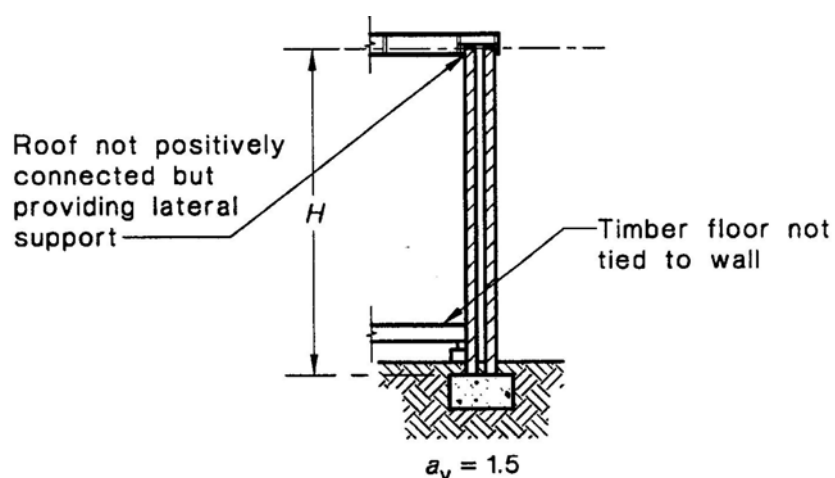


Table 15 - 2.2.2:

# 140 MORTARLESS WALL (unchamfered blocks)

Block: 15MPa      Wall Span: HORIZONTAL (reinforced vertically & horizontally)

Grout: 20MPa       $a_v = 2.50$        $a_h = 2.5$

|                             |       | $k F_0$ - MAXIMUM DESIGN LOAD IN COMPRESSION (kN/m) |      |      |      |      |                    |
|-----------------------------|-------|-----------------------------------------------------|------|------|------|------|--------------------|
| $\sqrt{H \times L}$<br>(mm) | $S_r$ | Eccentricity $e_1$                                  |      |      |      |      |                    |
|                             |       | $\leq 5.7\text{mm}$                                 | 10mm | 20mm | 30mm | 40mm | $\geq 57\text{mm}$ |
| 1200                        | 15.0  | 256                                                 | 195  | 145  | 94   | 44   | 0                  |
| 1600                        | 20.0  | 203                                                 | 144  | 102  | 59   | 16   | 0                  |
| 2000                        | 25.0  | 151                                                 | 94   | 59   | 23   | 0    | 0                  |
| 2400                        | 30.0  | 98                                                  | 43   | 15   | 0    | 0    | 0                  |
| 2800                        | 35.0  | 46                                                  | 0    | 0    | 0    | 0    | 0                  |

