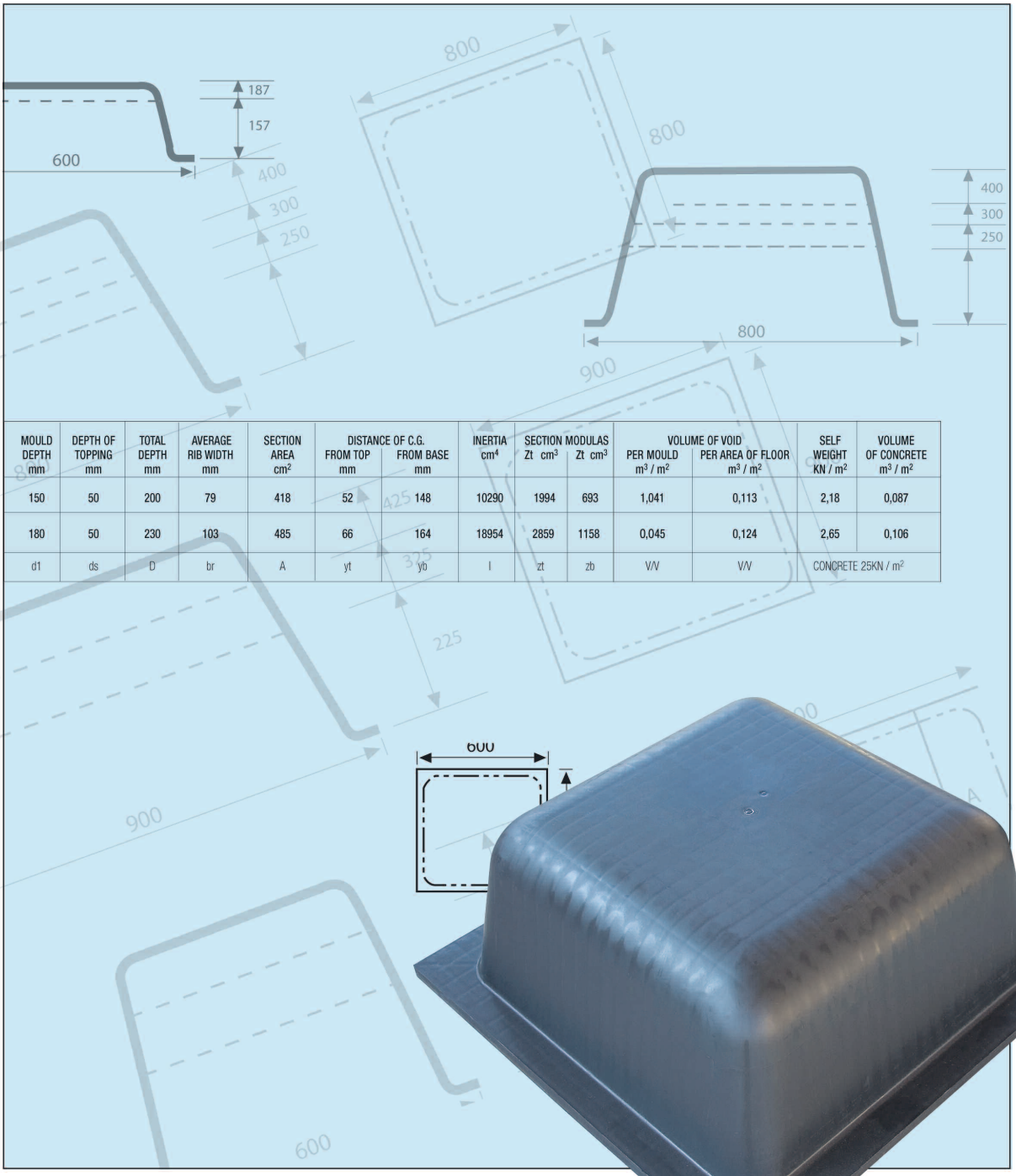
ATEX
WAFFLE MOULDS

TECHNICAL PROPERTIES



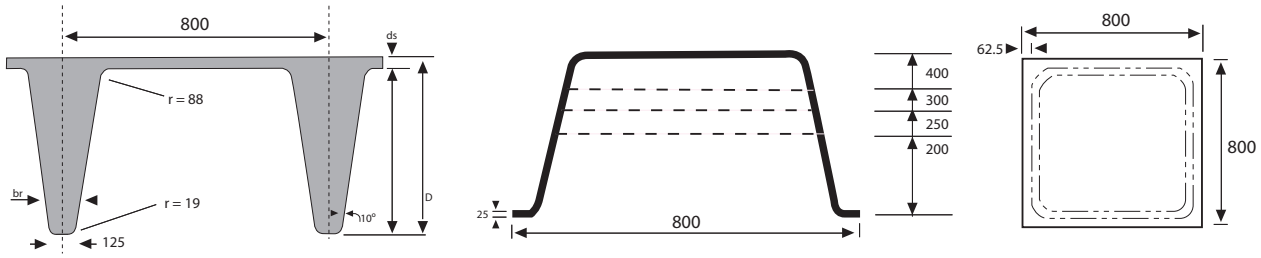
MOULD DEPTH mm	DEPTH OF TOPPING mm	TOTAL DEPTH mm	AVERAGE RIB WIDTH mm	SECTION AREA cm^2	DISTANCE OF C.G. FROM TOP mm	DISTANCE OF C.G. FROM BASE mm	INERTIA cm^4	SECTION MODULAS Zt cm^3	SECTION MODULAS Zt cm^3	VOLUME OF VOID PER MOULD m^3 / m^2	VOLUME OF VOID PER AREA OF FLOOR m^3 / m^2	SELF WEIGHT KN / m^2	VOLUME OF CONCRETE m^3 / m^2
150	50	200	79	418	52	148	10290	1994	693	1,041	0,113	2,18	0,087
180	50	230	103	485	66	164	18954	2859	1158	0,045	0,124	2,65	0,106
d1	ds	D	br	A	yt	yb	I	zt	zb	V/V	V/V	CONCRETE 25KN / m^2	

ATEX - The only name for in-situ ribbed floors

ATEX 800 & 900

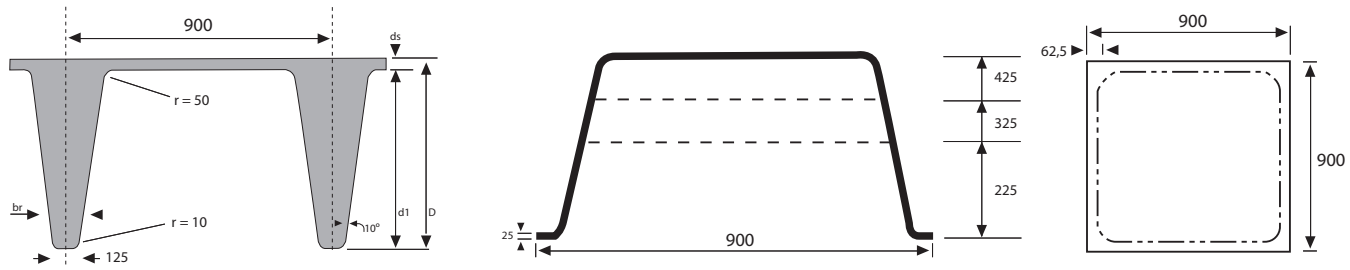
ATEX 800 x 800 Waffle Mould Properties

MOULD DEPTH mm	DEPTH OF TOPPING mm	TOTAL DEPTH mm	AVERAGE RIB WIDTH mm	SECTION AREA cm^2	DISTANCE OF C.G. FROM TOP mm	DISTANCE OF C.G. FROM BASE mm	INERTIA cm^4	SECTION MODULAS Zt cm^3	SECTION MODULAS Zt cm^3	VOLUME OF VOID PER MOULD m^3 / m^2	VOLUME OF VOID PER AREA OF FLOOR m^3 / m^2	SELF WEIGHT KN / m^2	VOLUME OF CONCRETE m^3 / m^2
200	50 75 100	250 275 300	184 189 173	710 910 1110	76 82 90	174 193 210	35092 47499 62178	4617 5793 6908	2017 2461 2961	0,080	0,125	3,15 3,75 4,40	0,125 0,150 0,175
250	50 75 100	300 325 350	173 177 182	810 1010 1210	95 99 106	205 226 244	60694 79426 100258	6389 8023 9458	2961 3514 4109	0,095	0,148	3,80 4,45 5,05	0,152 0,177 0,202
300	50 75 100	350 375 400	182 186 190	918 1118 1318	115 117 123	235 258 277	96048 122897 151574	8352 10504 12323	4087 4763 5472	0,115	0,179	4,30 4,90 5,55	0,171 0,196 0,221
400	50 75 100	450 475 500	200 204 208	1162 1362 1562	156 157 160	294 318 340	203062 251824 301779	13017 16040 18861	6907 7919 8876	0,145	0,226	5,60 6,25 6,85	0,224 0,249 0,274
d1	ds	D	br	A	yt	yb	I	zt	zb	V/V	V/V	CONCRETE 25KN / m^2	



ATEX 900 x 900 Waffle Mould Properties

MOULD DEPTH mm	DEPTH OF TOPPING mm	TOTAL DEPTH mm	AVERAGE RIB WIDTH mm	SECTION AREA cm^2	DISTANCE OF C.G. FROM TOP mm	DISTANCE OF C.G. FROM BASE mm	INERTIA cm^4	SECTION MODULAS Zt cm^3	SECTION MODULAS Zt cm^3	VOLUME OF VOID PER MOULD m^3	VOLUME OF VOID PER AREA OF FLOOR m^3 / m^2	SELF WEIGHT KN / m^2	VOLUME OF CONCRETE m^3 / m^2
225	50 75 100	275 300 325	172 176 180	816 1040 1266	83 87 95	192 213 230	49561 65670 84158	5971 7548 8858	2581 3083 3659	0,113	0,139	3,45 4,05 4,65	0,136 0,161 0,186
325	50 75 100	375 400 425	192 197 203	1043 1268 1493	122 123 128	253 277 297	125718 159245 194449	10304 12947 15191	4969 5749 6547	0,156	0,192	4,60 5,20 5,85	0,183 0,208 0,233
425	50 75 100	475 500 525	207 212 217	1310 1536 1761	165 183 185	310 337 360	255029 314390 374573	15456 19347 22701	8226 9315 10450	0,197	0,242	5,85 6,45 7,10	0,233 0,258 0,283
d1	ds	D	br	A	yt	yb	I	zt	zb	V/V	V/V	CONCRETE 25KN / m^2	

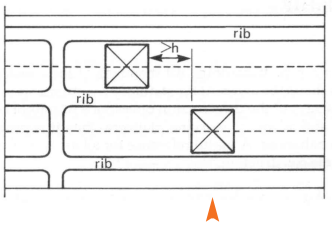


All measurements in millimeters.
Unless otherwise stated.

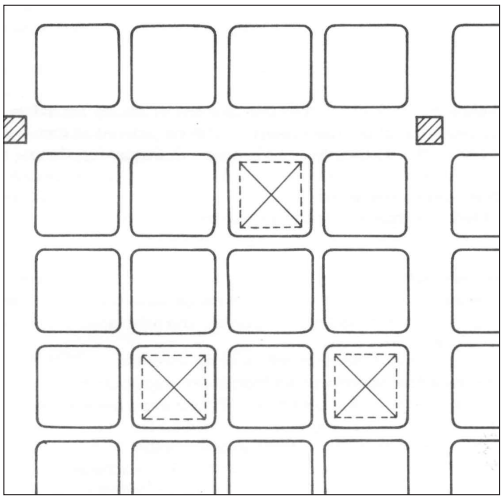
ATEX Zones for holes

Holes in ribs of waffle floors

In the structural topping, small holes, say 20mm square, can generally be permitted anywhere. In waffle floors, large holes should be restricted so that they are not placed adjacent to each other. In trough floors, large holes should preferably have a clear distance between edges at least equal to the depth of the slab. The frequency of such holes will clearly be affected by the loading and the permitted deflection: *See diagrams below* . Where large holes cause ribs to be omitted, special provision should be made either by increasing the solid slab areas (ie. omitting adjacent moulds), or by framing the holes with beams. Ideally, the soffit of such framing beams should remain within the floor zone and, for ease of construction, give a level soffit to the slab.



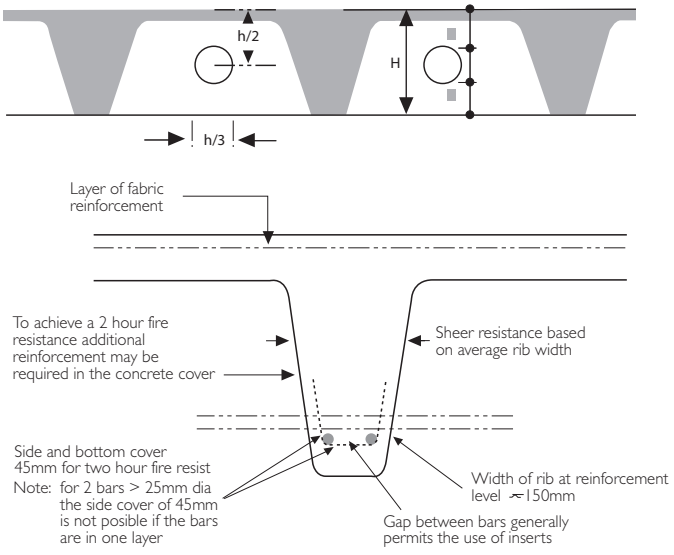
Plan on trough floor showing hole positions.



Plan on waffle floor showing hole positions.

Zones for holes

Holes not larger than h/3 in diameter can generally be provided in the ribs of trough or waffle floors without difficulty, and placed centrally within the slab depth. Spacing should not generally be closer than 2h on trough floors: *See diagrams below*. Special consideration should be given to such holes near to supports or to larger holes if these are required, such as for man access.



All measurements in millimeters.
Unless otherwise stated.

Finishes

The finish of the concrete in contact with the mould surface will be of a good quality, often suitable to be left as struck for many buildings. Obviously. particular attention must be paid to the joints between the moulds and other materials, otherwise it may be necessary to clean off grout fins to obtain a high overall finish.

Fire Resistance

The moulds have been tested by the British Construction Industry Research and Information Association and copies of this detailed report 107 are available from the Association.

Safety in Construction

The moulds must be firmly fixed against each other with the chosen support system securely and correctly placed beneath the moulds.

Care Information

(see Maintenance Brochure)

Moulds should be coated with a suitable chemical release agent or mould oil and care taken to keep all releasing agents off of the reinforcing steel.

Immediately after striking out the moulds they should be cleaned with non-abrasive tools or materials before re-using.

When removing moulds from the concrete, excessive leverage at the corners should be avoided.

If moulds are damaged they may be repaired by a low temperature plastic welding process and if required we can supply the information to do this.

When not in use moulds should stand nested together on the flange edge.

The size of the vibrator used when concreting should not exceed 40mm diameter and the poker should preferably be covered with a rubber sleeve.

Material Tolerances

The material used for mould production contains an ultra violet ray inhibitor to extend mould life. Polypropylene is subject to thermal movement over a range of temperatures and allowance must be made for this – a 1% tolerance in dimensions is permissible in extremes of temperature. Although every effort has been made to ensure accuracy of figures and calculations, they are intended for guidance only and we cannot accept responsibility for errors or omissions. Bearing in mind the developments in materials and alterations in specifications through improvements, Atex reserves the right to vary at the time of supply any of the details of the products as shown.

ATEX
WAFFLE MOULDS

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