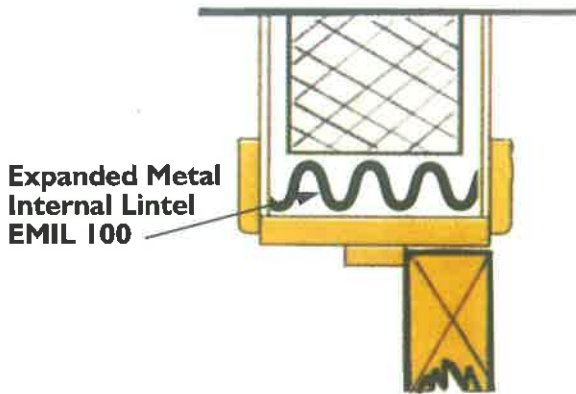


Steel Lintels

STEEL LINTELS

Steel Lintels are used to replace conventional casting of concrete lintels across doors and windows openings. Galvanised steel is used to manufacture the lintels which conform to BS 2989 : 1982.



Internal Lintel EMIL 100/70

PRODUCT BENEFITS:

- Lightweight yet stronger than conventional concrete lintels and can be lifted and installed by a single person.
- High quality corrosion protection system i.e. galvanised for internal lintels, U-channel lintels and lintel brackets.
- Material design for easy plastering and provides a stronger bond.
- Eliminates the need to cast concrete. Brick/Blockwork can commence immediately after installing the steel lintels.
- Safe working loads are tabulated for reference.

Lintel Ref. No.	Overall length of Lintel (mm)	Maximum span of opening (mm)	Width of Lintel (mm)	* Safe distributed loading (tonnes)
EMIL 100	900	700	70/100	max.
EMIL 70	1000	800	70/100	up to
	1100	900	70/100	0.7mT
	1200	1000	70/100	

* Highly recommended to lay 1st course of bricks and set for 1 day before continuing subsequent brick laying to minimise deflection.

EXPANDED METAL U-CHANNEL LINTEL DESIGN To BS 449

Opening Width m	Maximum Uniformly Distributed Load kN/m * + #					
	EMIL 100	EMSL 103	EMSL 103A	EMSL 103B	EMSL 103C	EMSL 103D
0.70	1.33					
0.80	0.97	2.87	6.15	7.65	9.88	16.91
0.90	0.73	2.37	5.08	6.32	8.17	13.98
1.00	0.56	1.99	4.27	5.31	6.86	11.74
1.10	0.44	1.70	3.64	4.53	5.85	10.01
1.20		1.43	3.14	3.90	5.04	8.63
1.30		1.16	2.73	3.40	4.39	7.52
1.40		0.96	2.40	2.99	3.86	6.61
1.50		0.80	2.13	2.65	3.42	5.85
1.60		0.67	1.90	2.36	3.05	5.22
1.70		0.57	1.70	2.12	2.74	4.68
1.80		0.49	1.48	1.84	2.37	4.23
1.90		0.42	1.28	1.59	2.05	3.83
2.00					1.78	3.49
2.10					1.56	3.20
2.20					1.37	2.94
2.30					1.21	2.64
2.40					1.08	2.35
2.50					0.96	2.10
2.60					0.86	1.88
2.70					0.78	1.69
2.80					0.70	1.53
2.90					0.64	1.39
3.00					0.58	1.26
3.10					0.53	1.15
3.20					0.48	1.05
3.30					0.44	0.96

Notes

- * Max. UDL is based on 100 mm brick wall with 10mm plaster finish to both faces
- + Density of brick = 22.6 kN/m³
- # Density of plaster finishes = 20 kN/m³

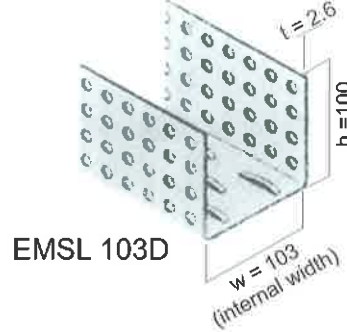
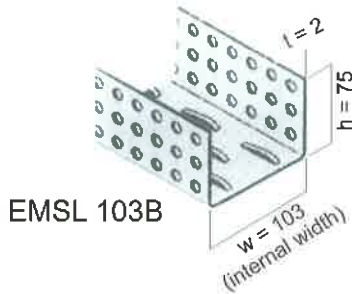
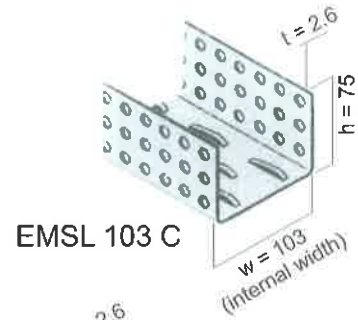
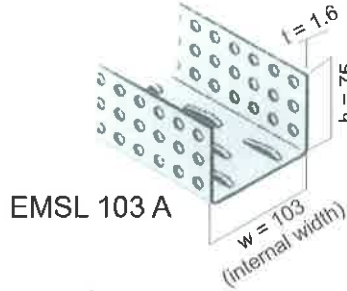
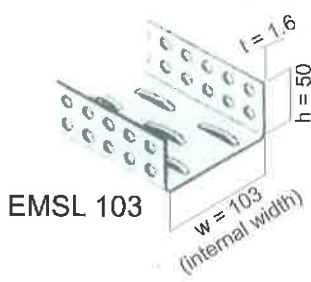
EXPANDED METAL U-CHANNEL LINTEL DESIGN To BS 449

Opening Width m	Maximum Height of 100 mm thk Brickwall Above Lintel (m)					
	EMIL 100	EMSL 103	EMSL 103A	EMSL 103B	EMSL 103C	EMSL 103D
0.70	0.49					
0.80	0.35	1.07	2.30	2.86	3.70	6.35
0.90	0.26	0.88	1.90	2.36	3.06	5.24
1.00	0.20	0.74	1.59	1.99	2.57	4.40
1.10	0.15	0.63	1.36	1.69	2.19	3.75
1.20		0.53	1.17	1.46	1.88	3.23
1.30		0.42	1.02	1.27	1.64	2.81
1.40		0.35	0.89	1.11	1.44	2.47
1.50		0.29	0.79	0.98	1.27	2.19
1.60		0.24	0.70	0.88	1.13	1.95
1.70		0.20	0.63	0.78	1.02	1.75
1.80		0.17	0.54	0.68	0.88	1.58
1.90		0.15	0.47	0.58	0.76	1.43
2.00					0.66	1.30
2.10					0.57	1.19
2.20					0.50	1.09
2.30					0.44	0.98
2.40					0.39	0.87
2.50					0.35	0.78
2.60					0.31	0.70
2.70					0.28	0.63
2.80					0.25	0.56
2.90					0.23	0.51
3.00					0.21	0.46
3.10					0.19	0.42
3.20					0.17	0.38
3.30					0.15	0.35

Note

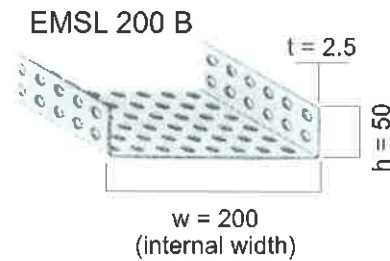
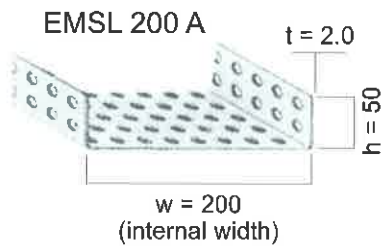
Dark bold line denotes the critical opening width under arching action

U-Channel Lintels

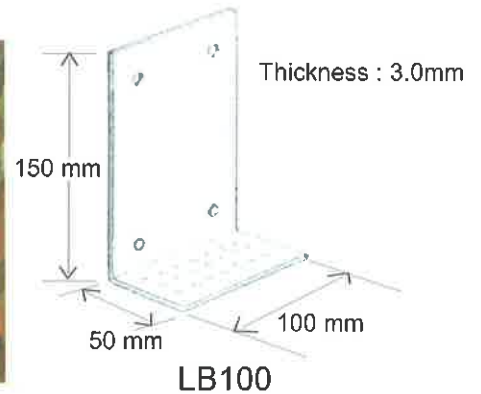


Lintel Ref. No.	EMSL 200A		EMSL 200B		
	0800	1300	0800	1300	1600
Manufactured Lengths	0800	1300	0800	1300	1600
100mm Increments	1200	1500	1200	1500	1800
Height 'h' (mm)	50	50	50	50	50
Material Thickness 't' (mm)	2.0	2.0	2.5	2.5	2.5
Internal Width (mm)	200	200	200	200	200
Total UDL (tonnes)	0.63	0.50	0.80	0.60	0.40
±10% Weight (kg/m)	4.5	4.5	5.71	4.5	5.71

Note: • Allowable moment, yield stress 250 N/mm²
• All dimensions in mm.



Fixing Accessories For Lintels Recommended Loads



Bracket Reference	Suitable for lintels	Maximum Load (kN)/bracket	
EMLB 100	EMIL 100 - EMSL 103, A, B, C, D	4.4	7.1
Metal expansion anchors (quality-diameter [mm])		2 No. - 8/10	4 No. - 8/10



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