


NAYLOR
CONCRETE

LINTELS



We are Naylor Concrete. For over 80 years, we have been manufacturing concrete lintels, fencing posts, precast retaining walls and liquid holding tanks. Naylor Concrete was originally established in Yorkshire, in 1943, as Dalestone Ltd, before joining the well-known Naylor Industries family in 1979, a company with over 130 years' experience in the construction industry. Since then, Naylor Concrete has continued to grow and now has two key divisions, Naylor Precast and Naylor Lintels.

Naylor Precast products are used extensively in the treatment and processing of waste liquids, storage of bulk materials and retaining walls. We also manufacture concrete bollards for security and concrete fencing posts.

Naylor Lintels are an unrivalled range of prestressed concrete lintels, one of the most trusted and widely specified lintel ranges in the UK. We offer a range of lintels to suit various building requirements, from our standard Economy range, to our premium XtraFire™ range. We work with Nationwide stockists to offer local supply facilities throughout the UK.

We know that finding the right product for your project is key, that's why our team of structural engineers, designers and CAD technicians will advise on all aspects of your project, from first concept through to final design details.

Contents

Introduction to Naylor	2
Lintel Range	4
An Introduction to Lintels	5
Technical Details & Accreditation	6
Technical Services	7
Economy Range	8
Hi-Spec Range	9
Fire-Spec Range	12
XtraFire™ Range	14
Padstone Range	15
Steel Range (L-Strip)	16
Installation Guides	17
Lintel Selector	18

Lintel Range

ECONOMY | HI-SPEC
FAIR FACED | FIRE-SPEC
FACED FIRE-SPEC | XTRAFIRE™



An Introduction



Naylor Lintels are the UK's most specified concrete lintels, with an unrivalled range offering lintels to suit every situation. Choose from six different types of lintels, Economy, Hi-Spec, Fair Faced, Fire-Spec, Faced Fire, XtraFire™. Also available, are our L-Strip Steel lintels and Padstones.

Being one of our core products, our concrete lintels have undergone years of testing and development to continuously improve their performance and meet your needs.



Technical Details & Accreditation

Typical uses for Lintels include:

- | Healthcare | Education | Retail & Leisure
- | Industrial | Commercial | Residential

Scope of Manufacture

Available in standard lengths of 900mm, 1200mm, 1500mm, 1800mm, 2100mm, 2400mm, 2700mm, 3000mm, 3300mm, 3600mm. Other lengths available on request.

Our lintels can be cut after casting, using a high-speed diamond cutting disc. Use of such equipment should be by a properly trained operative.

For Naylor Concretes COSHH information, please visit www.naylorconcrete.co.uk or call our technical hotline on 0800 5424 192

Certification

Our lintel products have been designed in accordance with Eurocode 2 Part 1-1: Design of concrete structures – General rules and rules for buildings. BSEN845: Part 2: 2013 + A1:2016 – Specification of ancillary components for masonry lintels.

Materials used in the manufacture of prestressed lintels comply with BSEN206: 2013 + A2:2021 – Concrete specification performance production and conformity, plus BS8500-1: 2015 – Complementary BS to BSEN206 describing ways of specifying concrete and gives specifiers guidance.

The prestressing wire complies with BS5896: 2012 – High tensile steel wire and strand for the prestressing of concrete.

Our fire rated lintels comply with BSEN1992-1-1:2004 – General rules: Structural Fire design.

Quality

Quality standards are maintained by Naylor quality inspectors and are audited by external certification bodies. Our prestressed lintel facilities meet the requirements of BS EN ISO 9001:2015. All units are manufactured under factory control and designed in accordance with the relevant British Standards and Eurocodes and are UKCA marked.

We conduct in-house load testing on all of our lintels, with external testing conducted at Lucideon Ltd. External fire testing for our lintels is conducted by Warrington Fire.

Regulations

All Naylor lintels have a low water absorption and as a result, can be used underground. All Naylor prestressed lintels have a concrete strength of 50N/mm² and are suitable to accept fixings providing that the tendons contained inside the unit remain undamaged. Prestressed lintels are likely to display a camber as an inherent property of prestressed elements.

Delivery

Available for collection directly from Naylor Concrete, Barnsley, or one of our Lintel Stockists located throughout the UK. For larger orders, we can deliver directly to site.

Technical Services

Our expert technical team are on hand to provide advice and guidance for any requirements and applications. Lintel schedules can be provided from working drawings and solutions offered. All proposed lintel schedules are to be checked by the incumbent structural engineer.

To speak with our team, email technical@naylor.co.uk or call 0800 5424 192.



Ready to specify products?

Scan the QR below to access our NBS Source profile.



Looking for a CPD Seminar?

Scan the QR code to register.



Economy Range

Our best-selling range. Economy lintels are cost effective and fully reversible. Ideal for standard housing or small load situations.

An extruded concrete finish for use in plastered situations. Available up to 3m in length and offer 30 minutes fire resistance only.



Load Table Unfactored Loads in kN/m		ER1 	ER2 	ER3 	ER4 	ER6 	ER7 	ER8
Suitable For Foundation Use		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Available Range Finish		Standard	Standard	Standard	Standard	Standard	Standard	Standard
Length	Clear Span	100x65	100x140	140x65	215x65	140x140	100x215	140x215
900mm	700mm	9.27	35.30	9.80	19.67	27.18	58.49	67.89
1200mm	1000mm	5.00	20.83	5.56	11.24	15.95	35.32	40.93
1500mm	1200mm	3.46	14.69	3.84	7.79	11.19	24.85	28.76
1800mm	1500mm	2.18	9.49	2.40	4.92	7.16	16.26	18.78
2100mm	1800mm	1.48	6.59	1.61	3.34	4.91	11.40	13.13
2400mm	2100mm	1.05	4.81	1.13	2.38	3.52	8.38	9.62
2700mm	2400mm	n/a	3.63	0.82	1.75	2.61	6.38	7.30
3000mm	2700mm	n/a	2.82	0.61	1.32	1.98	4.99	5.67
Lintel Weight kg/m		16	34	22	34	47	52	72

Load Table Unfactored Loads in kN/m		ER1 	ER2 	ER3 	ER4 	ER6 	ER7 	ER8
Orientation		On edge	On edge	On edge	On edge	On edge	On edge	On edge
Length	Clear Span	65x100	140x100	65x140	65x215	140x140	215x100	215x140
900mm	700mm	12.98	26.64	19.18	33.93	27.18	30.73	47.50
1200mm	1000mm	7.53	15.54	11.31	20.47	15.95	17.77	27.93
1500mm	1200mm	5.27	10.92	7.96	14.39	11.19	12.39	19.62
1800mm	1500mm	3.37	7.05	5.14	9.40	7.16	7.88	12.59
2100mm	1800mm	2.32	4.90	3.55	6.58	4.91	5.37	8.66
2400mm	2100mm	1.67	3.59	2.58	4.83	3.52	3.85	6.25
2700mm	2400mm	n/a	2.72	1.94	3.66	2.61	2.84	4.66
3000mm	2700mm	n/a	2.13	1.50	2.85	1.98	2.15	3.55
Lintel Weight kg/m		16	34	22	34	47	51.6	72

*Other lengths available on request.

Hi-Spec & Fair Faced

One of the most specified lintels in the UK. Hi-Spec lintels are designed for high performance while remaining cost effective. Available up to 3.6m in length and offer 30 minutes fire resistance only as standard. Longer lengths up to 4.8m available on request.

Standard Finish





An extruded concrete finish for use in plastered situations. Not ideal in situations where aesthetic finish is required.

Fair Faced Finish

Designed to the same spec as our Hi-Spec range, our Fair Faced lintels have a smooth, consistent colour finish. For use in exposed/painted situations. This Type C Fair Faced finish ensures all corners, arises, and faces on the lintel are perfect.




When ordering our Fair Faced Finish, simply add 'Faced' before the range code.



Load Table Units suitable for 100mm wide walls Unfactored Loads in kN/m		S4 	R6 	R9 	R12 
Fire Resistance Available (mins)		30	30	30	30
Suitable For Foundation Use		Yes	Yes	Yes	Yes
Maximum Stock Length Available		3000mm	3000mm	3600mm Longer lengths available on request - up to 4800mm	3600mm Longer lengths available on request - up to 4800mm
Available Range Finish		Standard/Faced	Standard/Faced	Standard/Faced	Standard/Faced
Length	Clear Span	100x100	100x140	100x215	100x290
900mm	700mm	15.77	38.73	96.25	127.77
1200mm	1000mm	10.90	30.87	62.92	83.26
1500mm	1200mm	9.41	27.22	50.00	77.43
1800mm	1500mm	7.21	19.32	37.15	63.07
2100mm	1800mm	5.04	13.59	28.63	47.94
2400mm	2100mm	3.70	10.04	22.61	36.95
2700mm	2400mm	2.81	7.70	18.13	28.62
3000mm	2700mm	2.19	6.06	14.48	22.77
3300mm	3000mm	n/a	4.88	11.68	18.51
3600mm	3200mm	n/a	4.27	9.78	15.79
Lintel Weight kg/m		23	34	52	70

*Other lengths available on request.


Hi-Spec & Fair Faced

Load Table Units suitable for 140mm wide walls Unfactored Loads in kN/m		R3 	S5 	R8 	R11 
Fire Resistance Available (mins)		30	30	30	30
Suitable For Foundation Use		Yes	Yes	Yes	Yes
Maximum Stock Length Available		2400mm	3600mm	3600mm Longer lengths available on request - up to 4800mm	3600mm
Available Range Finish		Standard/Faced	Standard/Faced	Standard/Faced	Standard/Faced
Length	Clear Span	140x100	140x140	140x215	140x290
900mm	700mm	55.12	58.05	117.41	155.63
1200mm	1000mm	32.59	36.52	71.19	101.39
1500mm	1200mm	23.01	27.35	54.50	89.79
1800mm	1500mm	14.93	19.20	41.19	68.08
2100mm	1800mm	10.42	13.67	31.18	51.69
2400mm	2100mm	7.65	10.07	23.94	39.78
2700mm	2400mm	n/a	7.68	18.46	30.76
3000mm	2700mm	n/a	6.03	14.63	24.43
3300mm	3000mm	n/a	4.83	11.84	19.82
3600mm	3200mm	n/a	4.20	10.38	16.87
Lintel Weight kg/m		34	47	72	97

*Other lengths available on request.

Hi-Spec & Fair Faced

Load Table Units suitable for 190mm wide walls Unfactored Loads in kN/m		R2 	R190 	R13 
Fire Resistance Available (mins)		30	30	30
Suitable For Foundation Use		Yes	Yes	Yes
Maximum Stock Length Available		3600mm	3600mm Longer lengths available on request - up to 4800mm	3600mm
Available Range Finish		Standard/Faced	Standard/Faced	Standard/Faced
Length	Clear Span	190x145	190x215	190x290
900mm	700mm	85.34	141.00	186.95
1200mm	1000mm	51.57	77.44	121.77
1500mm	1200mm	36.74	59.23	94.50
1800mm	1500mm	24.03	44.70	71.56
2100mm	1800mm	16.85	33.79	54.25
2400mm	2100mm	12.40	25.89	41.68
2700mm	2400mm	9.45	19.92	32.16
3000mm	2700mm	7.40	15.74	25.48
3300mm	3000mm	5.92	12.70	20.62
3600mm	3200mm	4.27	11.11	17.51
Lintel Weight kg/m		66	98	132

Load Table Units suitable for 215mm wide walls Unfactored Loads in kN/m		R7 	S8 	R14 
Fire Resistance Available (mins)		30	30	30
Suitable For Foundation Use		Yes	Yes	Yes
Maximum Stock Length Available		3600mm	3600mm Longer lengths available on request - up to 4800mm	3600mm
Available Range Finish		Standard/Faced	Standard/Faced	Standard/Faced
Length	Clear Span	215x145	215x215	215x290
900mm	700mm	100.27	152.21	202.02
1200mm	1000mm	60.61	79.20	127.15
1500mm	1200mm	42.18	60.55	96.07
1800mm	1500mm	27.71	45.67	72.71
2100mm	1800mm	19.49	34.49	55.07
2400mm	2100mm	14.38	26.40	42.27
2700mm	2400mm	10.99	20.29	32.58
3000mm	2700mm	8.62	16.01	25.78
3300mm	3000mm	6.90	12.90	20.83
3600mm	3200mm	4.98	11.27	17.67
Lintel Weight kg/m		75	111	150

*Other lengths available on request.

Fire-Spec & Faced Fire-Spec Range

Designed to the same spec as our Hi-Spec range, our Fire-Spec lintels are available in three different fire ratings, 60, 90 and 120 minutes, dependent upon the section width.

An extruded concrete finish for use in plastered situations. Available up to 3.6m in length and up to 120 minutes fire resistance as standard. Longer lengths up to 4.8m available on request.



Standard Finish

An extruded concrete finish for use in plastered situations. Not ideal in situations where aesthetic finish is required.

Fair Faced Finish



Designed to the same spec as our Fire-Spec range, our Faced Fire-Spec lintels are available in three different fire ratings, 60, 90 and 120 minutes, dependent upon the section width. This Type C Fair Faced finish ensures all corners, arises, and faces on the lintel are perfect.

When ordering our Fair Faced Finish, simply add 'Faced' before the range code.

Fire-Spec Load Table Units suitable for 140mm wide walls Unfactored Loads in kN/m		Fire R3		Fire S5		Fire R8		Fire R11	
		140mm x 100mm		140mm x 140mm		140mm x 215mm		140mm x 290mm	
Maximum Stock Length Available		3000mm		3600mm		3600mm		3600mm	
Available Range Finish		Standard/Faced		Standard/Faced		Standard/Faced		Standard/Faced	
		Longer lengths available on request - up to 4800mm							
Fire Resistance Available (mins)		60	90	60	90	60	90	60	90
Length	Clear Span	140x100	140x100	140x140	140x140	140x215	140x215	140x290	140x290
900mm	700mm	42.68	17.12	38.81	25.37	113.90	107.27	149.00	143.35
1200mm	1000mm	24.96	9.79	26.62	17.35	66.63	60.54	97.06	93.37
1500mm	1200mm	17.54	6.79	22.92	14.90	52.01	47.75	85.74	81.60
1800mm	1500mm	11.31	4.28	17.55	11.35	39.19	35.86	65.00	61.85
2100mm	1800mm	7.84	2.90	12.26	7.88	29.60	27.02	49.34	46.93
2400mm	2100mm	5.72	2.05	9.00	5.74	22.68	20.66	37.96	36.10
2700mm	2400mm	n/a	1.50	6.85	4.33	17.47	15.87	29.34	27.89
3000mm	2700mm	n/a	n/a	5.36	3.35	13.82	12.53	23.29	22.13
3300mm	3000mm	n/a	n/a	4.28	2.65	11.16	10.11	18.89	17.94
3600mm	3200mm	n/a	n/a	3.72	2.28	9.78	8.84	16.08	15.29
Lintel Weight kg/m		34		47		72		98	

*Other lengths available on request.

Fire-Spec & Faced Fire-Spec Range

Fire-Spec Load Table Units suitable for 190mm wide walls Unfactored Loads in kN/m		Fire R2 			Fire R190 			Fire R13 		
Maximum Stock Length Available		3600mm			3600mm Longer lengths available on request - up to 4800mm			3600mm		
Available Range Finish		Standard/Faced			Standard/Faced			Standard/Faced		
Fire Resistance Available (mins)		60	90	120	60	90	120	60	90	120
Length	Clear Span	190x145	190x145	190x145	190x215	190x215	190x215	190x290	190x290	190x290
900mm	700mm	85.34	70.58	54.60	135.35	131.45	127.62	179.74	173.11	167.65
1200mm	1000mm	51.57	42.15	32.18	71.70	65.73	64.34	117.06	112.73	107.70
1500mm	1200mm	36.74	29.86	22.65	55.66	51.79	52.60	90.25	85.89	81.36
1800mm	1500mm	24.03	19.40	14.59	41.87	38.83	39.33	68.32	65.01	61.56
2100mm	1800mm	16.85	13.52	10.09	31.58	29.20	29.52	51.78	49.25	46.62
2400mm	2100mm	12.39	9.90	7.32	24.14	22.28	22.49	39.77	37.81	35.77
2700mm	2400mm	9.45	7.50	5.50	18.54	17.07	17.22	30.67	29.14	27.56
3000mm	2700mm	7.40	5.84	4.24	14.62	13.44	13.54	24.29	23.07	21.80
3300mm	3000mm	5.92	4.64	3.33	11.78	10.80	10.88	19.64	18.64	17.60
3600mm	3200mm	4.27	3.33	2.37	10.29	9.42	9.49	16.67	15.85	15.05
Lintel Weight kg/m		66			98			132		

Fire-Spec Load Table Units suitable for 215mm wide walls Unfactored Loads in kN/m		Fire R7 			Fire S8 			Fire R14 		
Maximum Stock Length Available		3600mm			3600mm Longer lengths available on request - up to 4800mm			3600mm		
Available Range Finish		Standard/Faced			Standard/Faced			Standard/Faced		
Fire Resistance Available (mins)		60	90	120	60	90	120	60	90	120
Length	Clear Span	215x145	215x145	215x145	215x215	215x215	215x215	215x290	215x290	215x290
900mm	700mm	87.76	76.72	63.08	146.16	142.07	129.49	194.22	187.40	181.55
1200mm	1000mm	53.00	45.80	37.32	73.37	67.30	61.10	121.46	117.52	113.78
1500mm	1200mm	37.74	32.44	26.32	56.93	53.01	48.85	91.75	88.77	85.93
1800mm	1500mm	24.66	21.06	16.99	42.80	39.71	36.46	69.42	67.14	64.98
2100mm	1800mm	17.27	14.67	11.77	32.24	29.83	27.31	52.56	50.83	49.18
2400mm	2100mm	12.69	10.73	8.55	24.62	22.73	20.76	40.33	38.99	37.71
2700mm	2400mm	9.66	8.12	6.43	18.89	17.40	15.84	31.07	30.02	29.02
3000mm	2700mm	7.55	6.32	4.96	14.87	13.67	12.42	24.57	23.73	22.94
3300mm	3000mm	6.02	5.01	3.90	11.96	10.97	9.94	19.84	19.16	18.50
3600mm	3200mm	4.33	3.59	2.78	10.44	9.56	8.64	16.82	16.23	15.81
Lintel Weight kg/m		75			111			150		






*Other lengths available on request.

XtraFire Range™

Our most advanced range. XtraFire™ lintels are single cast lintels, cast in an ex-steel mould, providing a pencil round edges with minimal air holes. Smoother than our standard lintels, but not as smooth as our Fair Faced lintels.

Our XtraFire™ lintels are available in fire ratings of 60, 90, 120, 180 and 240 minutes, dependent on the dimensions selected.



Load Table Unfactored Loads in kN/m		XFR6 100mm wide walls 	XFR9 100mm wide walls 	XFS5 140mm wide walls 	XFR8 140mm wide walls 	XFS8 215mm wide walls 
Fire Resistance Available (mins)		R60 R90 R120 R180	R60 R90 R120 R180 R240	R60 R90 R120 R180 R240	R60 R90 R120 R180 R240	R60 R90 R120 R180 R240
Maximum Stock Length Available		2700mm		3600mm		
Length	Clear Span	100x140	100x215	140x140	140x215	215x215
900mm	700mm	29.74	65.73	29.02	107.48	99.05
1200mm	1000mm	15.18	47.67	17.80	61.20	72.06
1500mm	1200mm	10.66	39.41	12.48	43.79	56.82
1800mm	1500mm	6.64	25.10	8.00	28.60	37.28
2100mm	1800mm	4.72	19.40	5.49	20.33	26.18
2400mm	2100mm	3.42	14.40	3.95	15.06	19.29
2700mm	2400mm	2.56	11.07	2.94	11.57	14.71
3000mm	2700mm	1.97	8.74	2.24	9.14	11.51
3300mm	3000mm	1.54	7.05	1.59	7.37	9.20
3600mm	3200mm	0.92	6.17	1.11	6.45	8.00
Lintel weight kg/m		32	49	47	72	111

*Other lengths available on request.

Padstone Range

Strong, dense concrete C50 padstones, suitable for use in high and low strength situations that complement our prestressed lintel range. Designed to distribute a point load evenly into a structure.

Typically installed to distribute the concentrated load evenly at points where the ends of beams and lintels are built into a wall.



Padstones

Dimensions L x W x H mm

215 x 140 x 100

330 x 140 x 100

440 x 140 x 100

215 x 100 x 215

330 x 100 x 215

440 x 100 x 215

660 x 100 x 215

215 x 140 x 215

330 x 140 x 215

440 x 140 x 215

660 x 140 x 215

215 x 215 x 215

330 x 215 x 215

440 x 215 x 215

660 x 215 x 215

330 x 140 x 140

440 x 140 x 140

L-Shaped Padstones - Section mm

Dimensions L x W x H mm

330/330 x 100 x 215

440/440 x 100 x 215

Steel Range (L-Strip)

Our range of Steel L-Shaped angle lintels are suitable for brick and stone to carry the external leaf. Manufactured from 3mm thick steel.

Available in galvanised (Pregalv G600) and stainless steel (grade 304). Other specially designed steel lintels are available upon request.



Load Table Units suitable for 90mm & 130mm wide walls Unfactored Loads in kN/m		LG85 LS85	LG85 Stone LS85 Stone	LG165 LS165	LG165 Stone LS165 Stone	LG215 LS215	LG215 Stone LS215 Stone
		90mm wide walls	130mm wide walls	90mm wide walls	130mm wide walls	90mm wide walls	130mm wide walls
Maximum Stock Length Available		2100mm	2100mm	2700mm	2700mm	2700mm	2700mm
Available Range Finish		Galvanised Stainless Steel	Galvanised Stainless Steel	Galvanised Stainless Steel	Galvanised Stainless Steel	Galvanised Stainless Steel	Galvanised Stainless Steel
Length	Clear Span	90x85	130x85	90x165	130x165	90x215	130x215
900mm	700mm	22.85	22.85	32.75	32.75	62.10	62.10
1200mm	1000mm	12.09	12.09	17.32	17.32	32.85	32.85
1500mm	1200mm	8.02	8.02	11.50	11.50	21.15	21.15
1800mm	1500mm	5.37	5.37	7.69	7.69	13.25	13.25
2100mm	1800mm	3.42	3.42	5.51	5.51	8.51	8.51
2400mm	2100mm	n/a	n/a	4.14	4.14	5.46	5.46
2700mm	2400mm	n/a	n/a	3.22	3.22	3.54	3.54
3000mm	2700mm	n/a	n/a	2.58	2.58	n/a	n/a
3300mm	3000mm	n/a	n/a	2.11	2.11	n/a	n/a
3600mm	3200mm	n/a	n/a	1.86	1.86	n/a	n/a
Lintel Weight kg/m		5		7		9	

Installation Guides

Concrete Lintels

Our range of concrete lintels should be bedded on a level mortar bed, with a full masonry unit immediately below the lintel. Do not use cut-off blocks as they can permit local movement and cause stress.

Where possible, it is advised that on cavity wall construction that both internal and external leaves should be built uniformly. Before installation, examine all lintels carefully for any signs of defects or damages.

If your lintels are supporting concrete floors, check the correct unit has been installed. Take all necessary measures to avoid impact loading of lintels during placing of floor units and any sideways loading during adjustment of floor units. Naylor Concrete cannot be held responsible where a lintel depth supporting concrete floor/roofs is specified less than the recommended 140mm.

No rebate must be formed/cut into lintels, or holes drilled for chemical anchors. Plugging and drilling is acceptable providing that the location of prestressing tendons is not compromised.

Disclaimer: For spans greater than 1200mm, lintels should be adequately propped during construction at a maximum of 1200mm centres. Props should not be removed until the mortar has matured.

Our range of Economy lintels are fully reversible and can be installed in either direction as per specification. Therefore, these units are not marked.

All Hi-Spec, Fair Faced and Fire Spec lintels are marked 'TOP'. This surface should always remain uppermost. It is important that the lintels are installed the correct way according to the load bearing situation. If the mark 'TOP' cannot be seen, then the Naylor Technical team should be contacted and they will be able to identify the top of the lintel to help ensure the lintel is installed correctly.

Our Hi-Spec lintels must not be used in a cantilever situation unless specifically designed by a suitable qualified engineering professional.

Cutting

Prestressed concrete lintels may be cut using a high-speed diamond cutting disc. Use of such equipment should be by a properly trained operative who is aware of the health and safety requirements of the machine and the COSHH information for the product.

Lintel end bearing

Lintels are usually supplied with the following allowances for bearing at each end unless otherwise stated.

- 100mm for openings up to and including 1000mm
- 150mm for openings up to and including 3000mm
- 200mm for openings over 3000mm

It is however, the responsibility of the building designer to ensure that these end bearings are sufficient so that there is no over stressing of the masonry at the supports.

Steel Lintels

Our steel lintels should be bedded on a level full mortar bed. For spans greater than 1200mm temporary support should be used until the first 3 courses of masonry have matured sufficiently for the support to be removed.









In certain cases, the door frame, window frame and timber former for the opening are sufficient for this purpose but this is dependent upon the quality and material of the frame or former.

Lintel Selector

When it comes to choosing the right lintel for your next project, we've got the ultimate cheat sheet to help you decide.

Selector	Lintel Type	Dimensions (mm)	Max Length (mm)	Max Load kN/m	Max Fire Resistance (mins)	Suitable for Foundations	Available Finish
Economy Range	ER1	100 x 65	2400	1.05	30	Yes	Standard
	ER2	100 x 140	3000	2.82	30	Yes	Standard
	ER3	140 x 65	3000	0.82	30	Yes	Standard
	ER4	215 x 65	3000	1.32	30	Yes	Standard
	ER6	140 x 140	3000	1.98	30	Yes	Standard
	ER7	100 x 215	3000	4.99	30	Yes	Standard
	ER8	140 x 215	3000	5.67	30	Yes	Standard
	Hi-Spec & Fair Faced Range	S4	100 x 100	3000	2.19	30	Yes
R6		100 x 140	3600	4.27	30	Yes	Standard/Faced
R9		100 x 215	3600	9.78	30	Yes	Standard/Faced
R12		100 x 290	3600	15.79	30	Yes	Standard/Faced
R3		140 x 100	2400	7.65	30	Yes	Standard/Faced
S5		140 x 140	3600	4.2	30	Yes	Standard/Faced
R8		140 x 215	3600	10.38	30	Yes	Standard/Faced
R11		140 x 290	3600	16.87	30	Yes	Standard/Faced
R2		190 x 145	3600	4.27	30	Yes	Standard/Faced
R190		190 x 215	3600	11.11	30	Yes	Standard/Faced
R13		190 x 290	3600	17.51	30	Yes	Standard/Faced
R7		215 x 145	3600	4.98	30	Yes	Standard/Faced
S8		215 x 215	3600	11.27	30	Yes	Standard/Faced
R14		215 x 290	3600	17.67	30	Yes	Standard/Faced
Fire-Spec and Faced Fire-Spec Range	Fire R3	140 x 100	2400	1.5	90	Yes	Standard/Faced
	Fire S5	140 x 140	3600	2.28	90	Yes	Standard/Faced
	Fire R8	140 x 215	3600	8.84	90	Yes	Standard/Faced
	Fire R11	140 x 290	3600	15.29	90	Yes	Standard/Faced
	Fire R2	190 x 145	3600	3.33	120	Yes	Standard/Faced
	Fire R190	190 x 215	3600	9.42	120	Yes	Standard/Faced
	Fire R13	190 x 290	3600	15.85	120	Yes	Standard/Faced
	Fire R7	215 x 145	3600	3.59	120	Yes	Standard/Faced
	Fire S8	215 x 215	3600	9.56	120	Yes	Standard/Faced
	Fire R14	215 x 290	3600	16.23	120	Yes	Standard/Faced
XtraFire™ Range	XFR6	100 x 140	3600	0.92	180	Yes	Standard
	XFR9	100 x 215	3600	6.17	240	Yes	Standard
	XFS5	140 x 140	3600	1.11	240	Yes	Standard
	XFR8	140 x 215	3600	6.45	240	Yes	Standard
	XFS8	215 x 215	3600	8	240	Yes	Standard

Typical Applications

Lintel Reference	Size of Opening (mm)	Fire Rating (min)	Safe Working Load		Bearing (mm)	Common Uses
			UDL kN/m	PL (kN)		
ER1 	400	30	27	-	100	Service openings, below ground
ER2 	600	30	38	-	100	Service openings, door openings, window openings, short projections
R6 	910	30	49.6	25	100	Support hollowcore, foundations, inner leaf of window/door openings
R9 	1810	30	28	29	150	Supporting point loads from beams, hollowcore support, commercial buildings
Faced S5 	1200	30	27.2	20	150	Used when an aesthetic finish is required or as part of a feature eg flats, museums
Fire R8 	2100	60	22	26	150	Substations, flats, high rise buildings, commercial buildings
XFR9 	1800	240	19.4	18	150	Chimney, substations, flats, ground exposed to sulfate attack
Faced Fire R11 	3200	90	15.3	27	200	Used for an aesthetic finish in fire walls

Notes: **1** Point loads are taken as applied at mid-span of the lintel, independent to the UDL. **2** The range of lintels is not limited to the tabulated data. **3** All loads are unfactored.

Handy Specifiers Guide

	100mm walls			140mm walls		
	Lintel	Depth (mm)	SWL (kN/m)	Lintel	Depth (mm)	SWL (kN/m)
< 600mm openings : service openings and small windows	ER1	65	11.83	ER3	65	13.20
	ER2	140	46.68	ER2	100	35.51
	ER2	140	20.83	ER2	100	15.54
Doorways < 1050mm	S4	100	10.90	R3	100	32.59
	R6	140	30.87	Fire R3 (1hr)	100	24.96
	XFR6	140	15.18	S5	140	36.52
				Fire S5 (1hr)	140	26.62
				S5	140	10.07
Double doors and large openings < 2100mm	R6	140	10.04	R8	215	23.94
	R9	215	22.61	R11	290	39.78
	R12	290	36.95	Fire R8 (1hr)	215	22.68
	XFR9	215	14.40	Fire R11 (1hr)	290	37.96

Typical loadings

Masonry Loads per storey **1**

100mm Blockwork = 4.56 kN/m

140mm Blockwork = 6.38 kN/m

100mm Brickwork = 5.04 kN/m

Typical Floor buildups

Residential 4m floor span **2**

Beam and Block = 14.02 kN/m

Timber Floor = 5.00 kN/m

Residential 8m span **3**

Hollowcore = 23.6 kN/m

Commercial 8m span **3**

Hollowcore = 25.6 kN/m

Notes: **1** Assumed 2.4m height. **2** Assumed 3kN/m² self weight and 75mm screed. **3** Assumed 2.45kN/m² self weight and 40mm screed.

NAYLOR
CONCRETE

PRESTRESSED CONCRETE LINTELS | PADSTONES
RETAINING WALLS | LIQUID HOLDING TANKS | FENCING

Manufactured
AT THE HEART OF THE UK

NAYLOR CONCRETE PRODUCTS LIMITED

WHALEY ROAD, BARUGH GREEN, BARNSELY, SOUTH YORKSHIRE, S75 1HT

TELEPHONE: 01226 320810 | EMAIL: LINTELS@NAYLOR.CO.UK | WEB: WWW.NAYLORLINTELS.CO.UK