

Lintels for Heavy Duty applications

CI21 Lintel range

These are economic heavy duty lintels that retain the advantage of having stainless steel on all faces typically exposed to damp. They are easy for designers to integrate into steel frame constructions as the I-section is readily analysed by conventional frame analysis software.

Specification table for CI21 Lintels

Nominal cavity size (mm)	Nominal inner leaf (mm)	SPECIFY	Overall Height (mm)	Overall Width (mm)	Steel Gauge (mm)	Mass (kg/m)	Form Type	Ixx (cm ⁴)	Zxx (cm ³)
47-56	100-115	CI21-100/50/100*	212	240	4.0	41.4	No	3867	325.0
	125-140	CI21-100/50/125*	212	265	4.0	42.0	No	3917	321.1
	190-215	CI21-100/50/190	212	330	4.0	44.7	Yes	4222	340.5
57-71	100-115	CI21-100/60/100*	212	250	4.0	41.5	No	3885	323.7
	125-140	CI21-100/60/125*	212	275	4.0	42.3	No	3949	323.7
	190-215	CI21-100/60/190	212	340	4.0	45.0	Yes	4254	343.1
72-84	100-115	CI21-100/75/100*	212	265	4.0	42.1	No	3921	321.4
	125-140	CI21-100/75/125	212	290	4.0	42.8	No	3961	319.4
	190-215	CI21-100/75/190	212	355	4.0	45.7	Yes	4321	345.7
85-96	100-115	CI21-100/90/100*	212	280	4.0	42.6	No	3973	325.6
	125-140	CI21-100/90/125	212	305	4.0	43.1	Yes	3985	318.8
	190-215	CI21-100/90/190	212	372	4.0	46.4	Yes	4384	347.9
97-119	100-115	CI21-100/100/100	212	290	4.0	42.7	No	3963	322.2
	125-140	CI21-100/100/125	212	315	4.0	43.4	Yes	4005	320.4
	190-215	CI21-100/100/190	212	380	4.0	47.0	Yes	4416	350.5
120-139	100-115	CI21-100/120/100	212	315	4.0	43.7	Yes	4051	324.1
	125-140	CI21-100/120/125	212	340	4.0	44.5	Yes	4067	320.2
	190-215	CI21-100/120/190	212	405	4.0	47.9	Yes	4494	353.9
140-160	100-115	CI21-100/140/100	212	335	4.0	44.6	Yes	4124	327.3
	125-140	CI21-100/140/125	212	360	4.0	45.1	Yes	4095	319.9
	190-215	CI21-100/140/190	212	425	4.0	48.9	Yes	4566	356.7

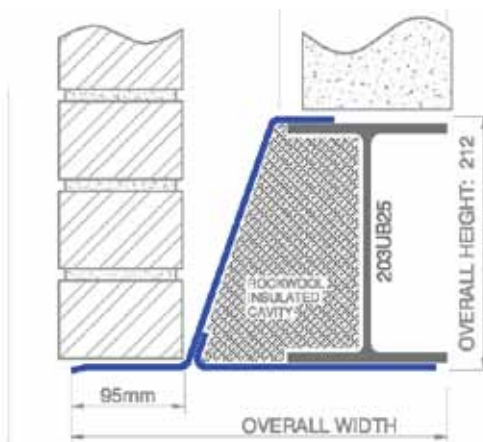
NOTES: CAUTION! Recommended only for applications with a dry inner leaf (most typical buildings). Lintels sizes marked (*) have a flat connection with the outer due to narrow cavity restriction.

Why use a CI21 Lintel?

- Mild steel economy but with
- Stainless steel durability
- Easy structural analysis
- Standard block coursing
- Conventional structural connections if required

Options

- Bolted end connections
- Stepped or cant outer and/or inner!
- Special outer dimensions
- Special inner dimensions
- Plaster key on the base or back



CI21-100/100/125

The LDX2101® outer is 75% stronger than the I-Beam itself!

For a stronger version, try the CI27 on the next page >

Allowable load for all CI21 Lintels*

Opening Span	Lintel Length	Max total load (kN)*	Load Example (see pg 85)	
900	1200	116.7	Caution: These are super-heavy duty lintels for unusual applications. We recommend their specification and application be checked by a Structural Engineer	
1200	1500	126.7		
1500	1800	136.7		
1650	1950	141.7		
1800	2100	141.7		
1950	2250	141.7		
2100	2400	141.7		
2250	2550	141.7		
2400	2700	141.7		
2550	2850	141.7		
2700	3000	141.7		
2850	3150	141.7		
3000	3300	141.7		
3150	3450	139.1		
3300	3600	132.8		
3450	3750	127.0	masonry & concrete floor	
3600	3900	121.8		
3750	4050	116.9		
3900	4200	111.2	masonry & tiled roof	
4050	4350	103.1		
4200	4500	95.9		
4350	4650	89.4		
4500	4800	83.5		
4650	4950	78.2		
4800	5100	73.4		
4950	5250	69.0		full height masonry
5100	5400	65.0		
5250	5550	61.4		
5400	5700	58.0		
5550	5850	54.9		
5700	6000	52.1	900mm of masonry	
5850	6150	49.4		
6000	6300	47.0		
6150	6450	44.7		
6300	6600	42.6		
6450	6750	40.7		
6600	6900	38.8		
6750	7050	37.1		
6900	7200	35.5		
7050	7350	34.0		
7200	7500	32.6		
7350	7650	31.3		
7500	7800	30.1	440mm of masonry	
7650	7950	28.9		
7800	8100	27.8		
7950	8250	26.8		
8100	8400	25.8		

Shorter & intermediate lengths can also be produced

Permissible Moment*: 54.8 kN.m
Permissible Point Load*: 65.0 kN

LOAD RATIO LIMITS* (OUTER : INNER)

65-100% Max load: 1:2 - 1:29

OR
< 65% Max Load: 1:1 - 1:29

*See page 78 for loading & Installation guide