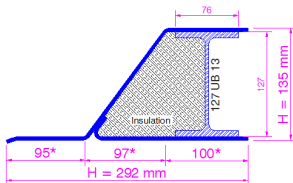


# Structural Steel Lintels

## CI Lintel Range

CI 13



\*dimensions will vary with wall construction

### Lintel section properties

UB	<b>UB 127 x 76 x 13</b>
Ixx	964 cm <sup>4</sup>
Zxx	172 cm <sup>3</sup>
Weight	26.3 Kg/m
Area	33.8 cm <sup>2</sup>
Ryy	5.34 cm

Permissible load ratio 1:1-1:19

### Lintel load Capacity Table

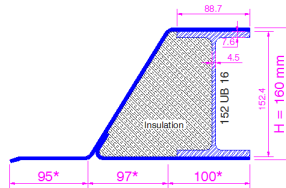
Opening Span	Lintel Length	Safe Load kN
600	900	102.1
900	1200	102.1
1200	1500	102.1
1500	1800	102.1
1800	2100	102.1
2100	2400	93.3
2400	2700	71.4
2700	3000	56.4
3000	3300	45.7
3300	3600	37.8
3600	3900	31.7
3900	4200	27.0
4200	4500	23.3
4500	4800	20.3

### Typical Wall Constructions

Construction	dimension (mm)
Outer leaf	100 to 150
Cavity	50 to 150
Inner leaf	100 to 150

Some restriction may apply

CI 16



\*dimensions will vary with wall construction

### Lintel section properties

UB	<b>UB 152 x 89 x 16</b>
Ixx	1,523 cm <sup>4</sup>
Zxx	228 cm <sup>3</sup>
Weight	29.6 Kg/m
Area	38.0 cm <sup>2</sup>
Ryy	6.33 cm

Permissible load ratio 1:1-1:19

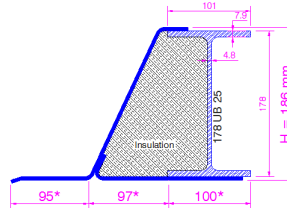
### Lintel load Capacity Table

Opening Span	Lintel Length	Safe Load kN
600	900	115.2
900	1200	115.2
1200	1500	115.2
1500	1800	115.2
1800	2100	115.2
2100	2400	115.2
2400	2700	112.8
2700	3000	89.1
3000	3300	72.2
3300	3600	59.7
3600	3900	50.1
3900	4200	42.7
4200	4500	36.8
4500	4800	32.1

### Typical Optional Features

Option	Spec. Suffix
Plaster key	Suffix / P
Lintray	Prefix / L
Feature brick	Suffix / FB
Outer step (of 20mm)	Suffix / ST
Cant outer (50 mm)	Suffix / C

CI 18



\*dimensions will vary with wall construction

### Lintel section properties

UB	<b>UB 178 x 102 x 19</b>
Ixx	2,309 cm <sup>4</sup>
Zxx	294 cm <sup>3</sup>
Weight	33.2 Kg/m
Area	42.7 cm <sup>2</sup>
Ryy	7.36 cm

Permissible load ratio 1:1-1:19

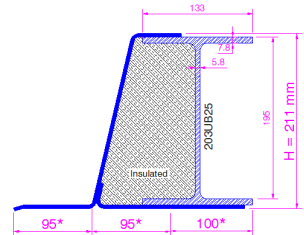
### Lintel load Capacity Table

Opening Span	Lintel Length	Safe Load kN
600	900	119.5
900	1200	119.5
1200	1500	119.5
1500	1800	119.5
1800	2100	119.5
2100	2400	119.5
2400	2700	119.5
2700	3000	119.5
3000	3300	109.5
3300	3600	90.5
3600	3900	76.0
3900	4200	64.8
4200	4500	55.8
4500	4800	48.6
4800	5100	42.8
5100	5400	37.9
5400	5700	33.8
5700	6000	30.3
6000	6300	27.4

### Material:

Base beam in structural steel S 355

CI 21



\*dimensions will vary with wall construction

### Lintel section properties

UB	<b>UB 203 x 133 x 25</b>
Ixx	3,671 cm <sup>4</sup>
Zxx	415 cm <sup>3</sup>
Weight	40.3 Kg/m
Area	51.7 cm <sup>2</sup>
Ryy	8.42 cm

Permissible load ratio 1:1-1:19

### Lintel load Capacity Table

Opening Span	Lintel Length	Safe Load kN
600	900	155.5
900	1200	155.5
1200	1500	155.5
1500	1800	155.5
1800	2100	155.5
2100	2400	155.5
2400	2700	155.5
2700	3000	155.5
3000	3300	155.5
3300	3600	143.8
3600	3900	120.9
3900	4200	103.0
4200	4500	88.8
4500	4800	77.4
4800	5100	68.0
5100	5400	60.2
5400	5700	53.7
5700	6000	48.2
6000	6300	43.5
6300	6600	39.5
6600	6900	36.0
6900	7200	32.9
7200	7500	30.2
7500	7800	27.8
7800	8100	25.7
8100	8400	23.9

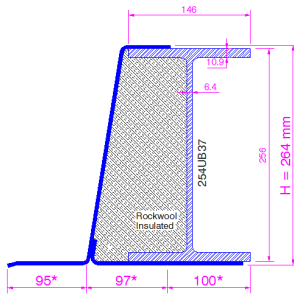
**How To Specify** a CI lintel, include full section name and wall construction "CI "Outerleaf/Cavity/Innerleaf" and any additional options  
Example: A CI 21 with 100mm brickwork, 100mm cavity and 140 mm block work with plaster key CI21-100/100/140 /P

The safe working load SWL represent the maximum un-factored load uniform distributed load the beam can carry.

**Bearings;** min 150mm each side, for high loads longer bearings may be needed, and bearing stresses should be checked

## CI Lintel Range

### CI 27



\*dimensions will vary with wall construction

#### Lintel section properties

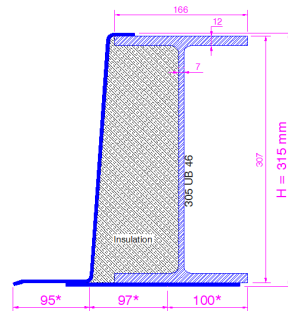
UB	<b>UB 254 x 146 x 37</b>
Ixx	8,136 cm <sup>4</sup>
Zxx	691 cm <sup>3</sup>
Weight	55.1 Kg/m
Area	70.7 cm <sup>2</sup>
Ryy	10.73 cm

Permissible load ratio 1:1-1:19

#### Lintel load Capacity Table

Opening Span	Lintel Length	Safe Load kN
600	900	171.6
900	1200	171.6
1200	1500	171.6
1500	1800	171.6
1800	2100	171.6
2100	2400	171.6
2400	2700	171.6
2700	3000	171.6
3000	3300	171.6
3300	3600	171.6
3600	3900	171.6
3900	4200	171.6
4200	4500	171.6
4500	4800	171.4
4800	5100	150.7
5100	5400	133.5
5400	5700	119.0
5700	6000	106.8
6000	6300	96.4
6300	6600	87.5
6600	6900	79.7
6900	7200	72.9
7200	7500	67.0
7500	7800	63.3
7800	8100	58.5
8100	8400	54.2

### CI 31



\*dimensions will vary with wall construction

#### Lintel section properties

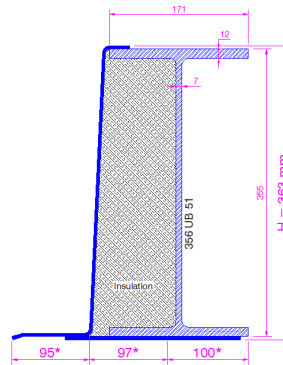
UB	<b>UB 305 x 165 x 46</b>
Ixx	13,761 cm <sup>4</sup>
Zxx	1,003 cm <sup>3</sup>
Weight	66.0 Kg/m
Area	84.6 cm <sup>2</sup>
Ryy	12.75 cm

Permissible load ratio 1:1-1:19

#### Lintel load Capacity Table

Opening Span	Lintel Length	Safe Load kN
600	900	177.3
900	1200	177.3
1200	1500	177.3
1500	1800	177.3
1800	2100	177.3
2100	2400	177.3
2400	2700	177.3
2700	3000	177.3
3000	3300	177.3
3300	3600	177.3
3600	3900	177.3
3900	4200	177.3
4200	4500	177.3
4500	4800	177.3
4800	5100	177.3
5100	5400	177.3
5400	5700	177.3
5700	6000	177.3
6000	6300	163.1
6300	6600	147.9
6600	6900	134.8
6900	7200	123.3
7200	7500	113.3
7500	7800	104.4
7800	8100	96.5
8100	8400	89.5

### CI36



\*dimensions will vary with wall construction

#### Lintel section properties

UB	<b>UB 356 x 171 x 51</b>
Ixx	19,368 cm <sup>4</sup>
Zxx	1,208 cm <sup>3</sup>
Weight	71.8 Kg/m
Area	92.0 cm <sup>2</sup>
Ryy	14.51 cm

Permissible load ratio 1:1-1:19

#### Lintel load Capacity Table

Opening Span	Lintel Length	Safe Load kN
600	900	199.2
900	1200	199.2
1200	1500	199.2
1500	1800	199.2
1800	2100	199.2
2100	2400	199.2
2400	2700	199.2
2700	3000	199.2
3000	3300	199.2
3300	3600	199.2
3600	3900	199.2
3900	4200	199.2
4200	4500	199.2
4500	4800	199.2
4800	5100	199.2
5100	5400	199.2
5400	5700	199.2
5700	6000	199.2
6000	6300	199.2
6300	6600	199.2
6600	6900	189.7
6900	7200	173.6
7200	7500	159.4
7500	7800	146.9
7800	8100	135.8
8100	8400	126.0

**How To Specify a CI lintel;** include full section name and wall construction then any optional features e.g plaster key.

#### Typical Optional Features

Option	Spec. Suffix
Plaster key	Suffix / P
Lintray	Prefix /L
Feature brick	Suffix / FB
Outer step (of 20mm)	Suffix / ST
Cant outer (50 mm)	Suffix / C

#### Typical Wall Constructions

Construction	dimension (mm)
Outer leaf	100 to 150
Cavity	50 to 150
Inner leaf	100 to 150

\*Can also be manufactured to suit solid walls with reduces load capacity.

Some cavities may be unavailable on wide I beams.

#### Material:

Base beam in structural steel S 355

**How To Specify a CI lintel,** include full section name and wall construction "CI "Outerleaf/Cavity/Innerleaf" and any additional options  
Example: A CI 21 with 100mm brickwork, 100mm cavity and 140 mm block work with plaster key CI21-100/100/140 /P

The safe working load SWL represent the maximum un-factored load uniform distributed load the beam can carry.

**Bearings;** min 150mm each side, for high loads longer bearings may be needed, and bearing stresses should be checked