Triple E Ltd BEEEM Load Tables Date: August 2023

rev: 2

# Unrestrained single span of 125x250 BEEEM™

4 off GR 8.8 M16 bolts - end to end connection detail Spliced joints
Deflection limited by length/250

SPAN	RESTRAINT	UDL	MAX UDL	CPL	TPL (each)
(m)		(kN/m)	(kN)	(kN)	(kN/point)
2	None	35	70	39.4	29.5
3	None	22.4	67.3	29.5	22.2
4	None	9.8	39.4	19.7	14.8
5	None	7.1	35.5	16.4	12.3
6	None	4.4	26.2	13.1	9.8

Above loads may be increased by 1.11 for WIND LOADING ONLY
This table is provided as a guide and assumes all loads are applied at nodes.
All structures Should be checked by a suitable qualified structural Engineer
Factor of Safety = 1.5

Calculations as per BS EN 1993-1-1

All allowable loads above take the self weight of the BEEEM™ into account.

BEEEM Load Tables Date: August 2023

rev: 2

## Restrained single span of 125x250 BEEEM™

4 off GR 8.8 M16 bolts - end to end connection detail Spliced joints Deflection limited by length/250

SPAN	RESTRAINT	UDL	MAX UDL	CPL	TPL (each)
(m)		(kN/m)	(kN)	(kN)	(kN/point)
2	Every 750 mm	35	70	44	33
3	Every 750 mm	23.3	70	33.7	25.2
4	Every 750 mm	11.7	46.7	23.3	17.5
5	Every 750 mm	8.4	42.1	19.4	14.6
6	Every 750 mm	5.2	31.1	15.6	11.7
7	Every 750 mm	4.1	28.4	13.6	10.2
8	Every 750 mm	2.9	23.3	11.7	8.7
9	Every 750 mm	2.3	20.7	10	7.5
10	Every 750 mm	1.7	16.8	8.4	6.3

Above loads may be increased by 1.11 for WIND LOADING ONLY

This table is provided as a guide and assumes all loads are applied at nodes. All structures Should be checked by a suitable qualified structural Engineer Factor of Safety = 1.5

Calculations as per BS EN 1993-1-1

All allowable loads above take the self weight of the BEEEM ™ into account.

pad Tables Date: August 2023

rev: 2

#### Unrestrained laminated span of 125x250 BEEEM™

4 off GR 8.8 M16 Bolts - end to end connection detail
Sections in a laminated span are to be staggered so that joints are offset
Upper and lower BEEEM™ sections to be connected at 500 mm centres with 2 off M16 GR8.8 bolts.
Spliced joints at all connections top and bottom
Deflection limited by length/250

SPAN	RESTRAINT	UDL	MAX UDL	CPL	TPL (each)
(m)		(kN/m)	(kN)	(kN)	(kN/point)
2	None	46	92	48	36
3	None	32.8	98.5	43.7	32.8
4	None	19.7	78.7	39.3	29.5
5	None	14.2	70.8	32.6	24.5
6	None	8.7	51.9	26	19.5
7	None	6.7	47.2	22.6	17
8	None	4.8	38.6	19.3	14.5

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This table is provided as a guide and assumes all loads are applied at nodes.
All structures Should be checked by a suitable qualified structural Engineer
Factor of Safety = 1.5
Calculations as per BS EN 1993-1-1
All allowable loads above take the self weight of the BEEEM ™ into account.

BEEEM Load Tables Date: August 2023

rev: 2

#### Restrained laminated span of 125x250 BEEEM™

4 off GR 8.8 M16 Bolts - end to end connection detail
Sections in a laminated span are to be staggered so that joints are offset
Upper and lower BEEEM™ sections to be connected at 500 mm centres with 2 off M16 GR8.8 bolts.
Spliced joints at all connections top and bottom
Deflection limited by length/250

SPAN	RESTRAINT	UDL	MAX UDL	CPL	TPL (each)
(m)		(kN/m)	(kN)	(kN)	(kN/point)
2	Every 750 mm	46	92	56	42
3	Every 750 mm	35	105	54.5	40.9
4	Every 750 mm	24	96	53	39.8
5	Every 750 mm	19.7	98.3	49.8	37.4
6	Every 750 mm	15.3	92	46.7	35
7	Every 750 mm	12.4	86.9	42.3	31.8
8	Every 750 mm	9.5	76	38	28.5
9	Every 750 mm	7.8	69/8	34	25.5
10	Every 750 mm	6	60	30	22.5
11	Every 750 mm	4.7	51.6	25.2	18.9
12	Every 750 mm	3.4	40.7	20.3	15.3

Above loads may be increased by 1.11 for WIND LOADING ONLY This table is provided as a guide and assumes all loads are applied at nodes. All structures Should be checked by a suitable qualified structural Engineer Triple E Ltd BEEEM Load Tables Date: August 2023 rev: 2

Factor of Safety = 1.5
Calculations as per BS EN 1993-1-1

All allowable loads above take the self weight of the BEEEM  $^{\mathtt{m}}$  into account.

Triple E Ltd BEEEM Load Tables Date: August 2023 rev: 2

## Unrestrained single span of 250x250 BEEEM™

8 off GR 8.8 M16 bolts - end to end connection detail Spliced joints
Deflection limited by length/250

SPAN	RESTRAINT	UDL	MAX UDL	CPL	TPL (each)
(m)		(kN/m)	(kN)	(kN)	(kN/point)
2	None	21	42	26	19.5
3	None	15.5	46.5	23	17.3
4	None	10	40	20	15
5	None	7.7	38.3	18	13.5
6	None	5.3	32	16	12

Above loads may be increased by 1.11 for WIND LOADING ONLY
This table is provided as a guide and assumes all loads are applied at nodes.
All structures Should be checked by a suitable qualified structural Engineer
Factor of Safety = 1.5
Calculations as per BS EN 1993-1-1

All allowable loads above take the self weight of the BEEEM ™ into account.

## Restrained single span of 250x250 BEEEM™

8 off GR 8.8 M16 bolts - end to end connection detail Spliced joints
Deflection limited by length/250

SPAN	RESTRAINT	UDL	MAX UDL	CPL	TPL (each)
(m)		(kN/m)	(kN)	(kN)	(kN/point)
2	Every 750 mm	21	42	26	19.5
3	Every 750 mm	15.5	46.5	23	17.3
4	Every 750 mm	10	40	20	15
5	Every 750 mm	7.7	38.7	18.2	13.7
6	Every 750 mm	5.5	32.8	16.4	12.3
7	Every 750 mm	4.4	30.5	14.7	11
8	Every 750 mm	3.3	26	13	9.8
9	Every 750 mm	2.4	21.8	10.5	7.9
10	Every 750 mm	1.6	16	8	6

Above loads may be increased by 1.11 for WIND LOADING ONLY

This table is provided as a guide and assumes all loads are applied at nodes. All structures Should be checked by a suitable qualified structural Engineer Factor of Safety = 1.5

Calculations as per BS EN 1993-1-1

All allowable loads above take the self weight of the BEEEM ™ into account.

Triple E Ltd BEEEM Load Tables Date: August 2023

rev: 2

## Unrestrained laminated span of 250x250 BEEEM™

4 off GR 8.8 M16 bolts - end to end connection detail
Sections in a laminated span are to be staggered so that joints are offset
Upper and lower BEEEM™ sections to be connected at 500 mm centres with 2 off M16 GR8.8 bolts.
Spliced joints at all connections top and bottom
Deflection limited by length/250

SPAN	RESTRAINT	UDL	MAX UDL	CPL	TPL (each)
(m)		(kN/m)	(kN)	(kN)	(kN/point)
2	None	41	82	54	40.5
3	None	30.5	91.5	48.5	36.4
4	None	20	80	43	32.3
5	None	15.7	78.3	38.5	28.9
6	None	11.3	68	34	25.5
7	None	9.2	64.6	31.3	23.4
8	None	7.1	57	28.5	21.4

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Factor of Safety = 1.5
Calculations as per BS EN 1993-1-1
All allowable loads above take the self weight of the BEEEM ™ into account.

Triple E Ltd BEEEM Load Tables Date: August 2023

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## Restrained laminated span of 250x250 BEEEM™

4 off GR 8.8 M16 Bolts - end to end connection detail
Sections in a laminated span are to be staggered so that joints are offset
Upper and lower BEEEM™ sections to be connected at 500 mm centres with 2 off M16 GR8.8 bolts.
Spliced joints at all connections top and bottom
Deflection limited by length/250

SPAN	RESTRAINT	UDL	MAX UDL	CPL	TPL (each)
(m)		(kN/m)	(kN)	(kN)	(kN/point)
2	Every 750 mm	41	82	54	40.5
3	Every 750 mm	30.5	91.5	48.5	36.4
4	Every 750 mm	20	80	43	32.3
5	Every 750 mm	15.7	78.3	38.5	28.9
6	Every 750 mm	11.3	68	34	25.5
7	Every 750 mm	9.2	64.6	31.3	23.4
8	Every 750 mm	7.1	57	28.5	21.4
9	Every 750 mm	5.9	52.9	25.9	19.4
10	Every 750 mm	4.6	46.4	23.2	17.4
11	Every 750 mm	3.9	43.2	21.3	16
12	Every 750 mm	3.2	38.7	19.3	14.5

Above loads may be increased by 1.11 for WIND LOADING ONLY
This table is provided as a guide and assumes all loads are applied at nodes.
All structures Should be checked by a suitable qualified structural Engineer

Triple E Ltd BEEEM Load Tables Date: August 2023 rev: 2

Factor of Safety = 1.5
Calculations as per BS EN 1993-1-1
All allowable loads above take the self weight of the BEEEM ™ into account.