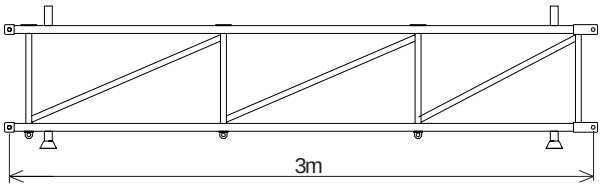
USER INSTRUCTIONS - LATTICE SPREADER:30m

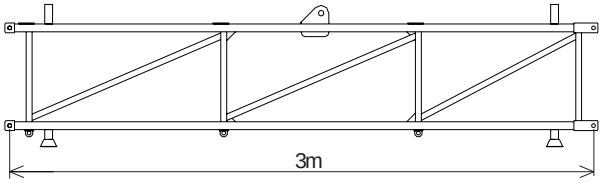
LIFTING GEAR UK
HIRE | SALES | SERVICE

The Lattice System (MLS) is a light-weight modular spreader suitable for long, light loads, and has been specially developed to suit roofing sheets.
Maximum spans from 6m up to 42m in 3m increments are achievable using this system. Lower support slings can be attached to the frames every 2m to ensure a uniformly distributed load.

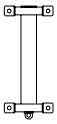
Components.



TYPE 1:
100KG

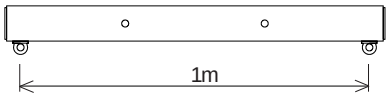


TYPE 2:
137KG

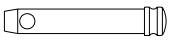


TYPE 3:
17.5 KG

FRAMES

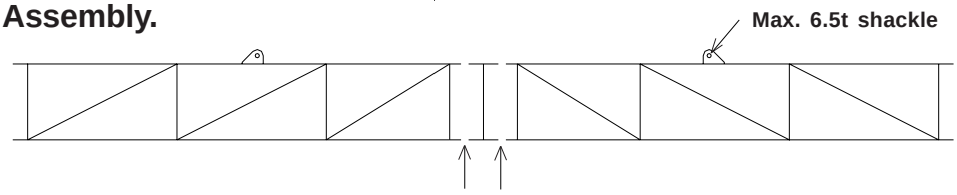


CROSS BAR: 7.5KG

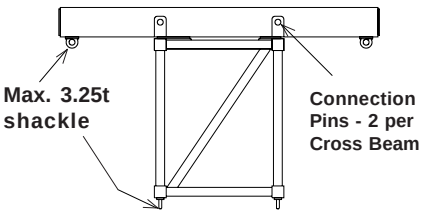


CONNECTION PIN

Assembly.



CONNECTION JOINTS - USE 4 no. CONNECTION PINS PER JOINT.



TYPICAL CROSS BAR CONNECTION

Spreader Specification.

- Rated at 2 tonnes WLL - Uniformly Distributed Load only (30m span).
- 'Sling to Vertical' angle, β, 45 degrees or less.
- The sling arrangement must not be modified without the manufacturers written approval.
- Lifting points: Slings can be connected to weld eyes on ends of 1m span cross bars, or to weld eyes on underside of frames.
- Maximum length of load that can be lifted: 33m (1.5m overhang per end).

WARNING!

- Personnel using this system should be suitably trained, competent and have a clear under standing of Safe Slinging procedures, in accordance with the procedures laid down in 'Lifting Operations and Lifting Equipment Regulations 1998' (LOLER).
- THE SLING LENGTH IS CRITICAL TO THE SAFE USE OF THE SPREADER - THE 'SLING TO VERTICAL' ANGLE, β, MUST NOT BE MORE THAN 45 DEGREES.
- DO NOT EXCEED 2 TONNES, EVEN AT SHORTER SPANS.
- **The number of lifting points must not be less than shown in the diagram overleaf.**

USER INSTRUCTIONS - LATTICE SPREADER:30m

Configuration.

30m Spreader: | 1 | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 2 | 1 |

1 = Type 1 Frame x 8
2 = Type 2 Frame x 2
3 = Type 3 Frame x 1
No. of Crossbeams / Load connections = 16

Maximum 1.5m overhang of roofing sheet per end.

Lifting Points / Load connection points.

30m Spreader:

● = connection point for cross bar, and/or connection point for sling to weld eye.

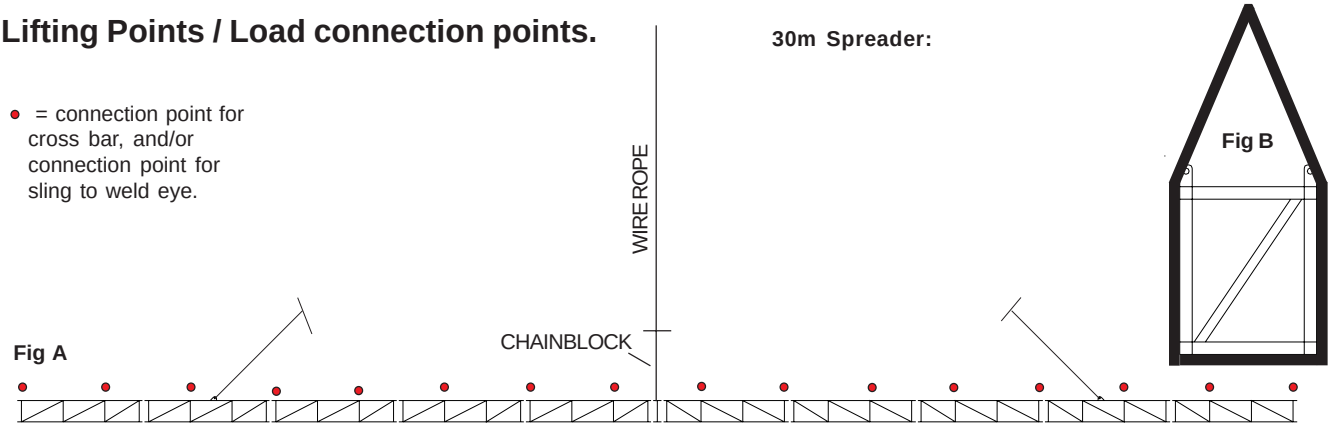


Fig A

Fig B

1231 KG

ROUND/WEBBING SLING TO CONNECT BETWEEN CHAIN BLOCK AND SPREADER

40 Pins for Lattice Sections
32 Pins for Cross Bars

Rigging Assembly Instructions.

Connection between spreader and crane hook:

Outer slings:
2 no. 15m EWL Wire Rope Slings. These sling lengths are essential to ensure the Sling to Vertical Angle is less than 45 degrees.

Central Sling:
This sling is to support the weight of the spreader. Theoretical length: 10.7 metres.
Assemble chain block at bottom, wire rope at top (FIG A).
Connection of spreader to chainblock: Use Roundsling or webbing sling round the middle of the spreader, with both sling ends connected to chainblock (FIG B).
Set overall vertical length to 10.7m.
Lift up spreader (without load). Adjust chain block until spreader is horizontally level between the outer slings e.g. if the spreader sags between the outer slings, shorten chain block sling. If the spreader is inverted, lengthen chain block sling.
Look down end of spreader to check the level.
You may need to set the spreader back on the floor to do the adjustment each time, until it is correct.
The load can then be lifted.

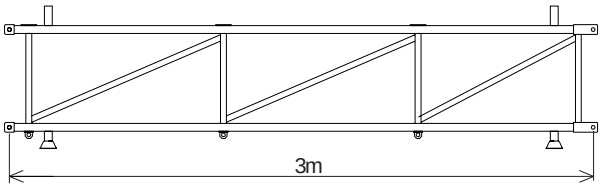
SAFE USE OF SPREADERS.

- ALL LIFTING OPERATIONS MUST BE PLANNED IN ACCORDANCE WITH 'LIFTING OPERATIONS AND LIFTING EQUIPMENT REGULATIONS 1998' (LOLER).
- A RISK ANALYSIS MUST BE COMPLETED.
- A METHOD STATEMENT SHOULD BE PRODUCED AND SEEN BY THE PERSONNEL USING THE EQUIPMENT.
- Adhere to the correct beam configuration when planning lift.
- Only the manufacturer's component parts must be used in beam assembly.
- Ensure components are connected/tightened sufficiently, and in good condition.
- Ensure all personnel are clear from lift path prior to commencing lift.
- Take load up steadily, ensure beam is level - never shock load the lifting rig.
- Use tag lines on load with sufficient length to stand well clear.
- Never leave a suspended load unsupervised.
- If components are lost, contact your supplier for replacements.
- Store beams and equipment safely when not in use.

USER INSTRUCTIONS - LATTICE SPREADER:33m

The Lattice System (MLS) is a light-weight modular spreader suitable for long, light loads, and has been specially developed to suit roofing sheets.
Maximum spans from 6m up to 42m in 3m increments are achievable using this system. Lower support slings can be attached to the frames every 2m to ensure a uniformly distributed load.

Components.



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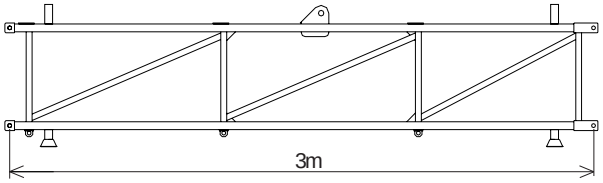

TYPE 2:
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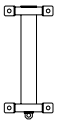
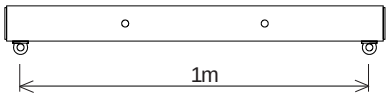
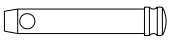


TYPE 3:
17.5 KG

FRAMES

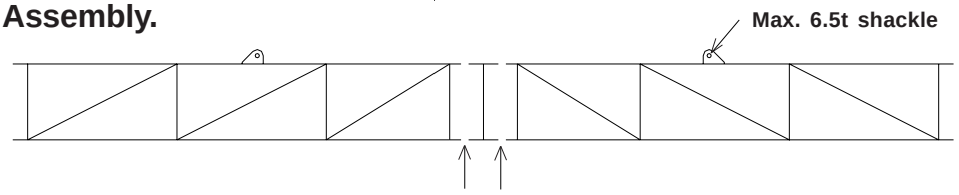


CROSS BAR: 7.5KG

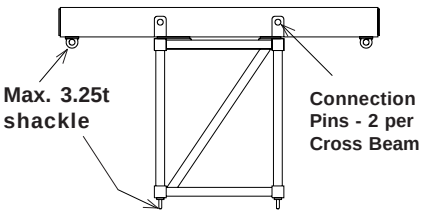


CONNECTION PIN

Assembly.



CONNECTION JOINTS - USE 4 no. CONNECTION PINS PER JOINT.



TYPICAL CROSS BAR CONNECTION

Spreader Specification.

- Rated at 2 tonnes WLL - Uniformly Distributed Load only (30m span).
- 'Sling to Vertical' angle, β, 45 degrees or less.
- The sling arrangement must not be modified without the manufacturers written approval.
- Lifting points: Slings can be connected to weld eyes on ends of 1m span cross bars, or to weld eyes on underside of frames.
- Maximum length of load that can be lifted: 36m (1.5m overhang per end).

WARNING!

- Personnel using this system should be suitably trained, competent and have a clear under standing of Safe Slinging procedures, in accordance with the procedures laid down in 'Lifting Operations and Lifting Equipment Regulations 1998' (LOLER).
- THE SLING LENGTH IS CRITICAL TO THE SAFE USE OF THE SPREADER - THE 'SLING TO VERTICAL' ANGLE, β, MUST NOT BE MORE THAN 45 DEGREES.
- DO NOT EXCEED 2 TONNES, EVEN AT SHORTER SPANS.
- **The number of lifting points must not be less than shown in the diagram overleaf.**

USER INSTRUCTIONS - LATTICE SPREADER:33m

Configuration.

33m Spreader: | 1 | 2 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 2 | 1 |

1 = Type 1 Frame x 9
2 = Type 2 Frame x 2
3 = Type 3 Frame x 1
No. of Crossbeams/ Load connections = 18

Maximum 1.5m overhang of roofing sheet per end.

Lifting Points / Load connection points.

● = connection point for cross bar, and/or connection point for sling to weld eye.

33m Spreader:

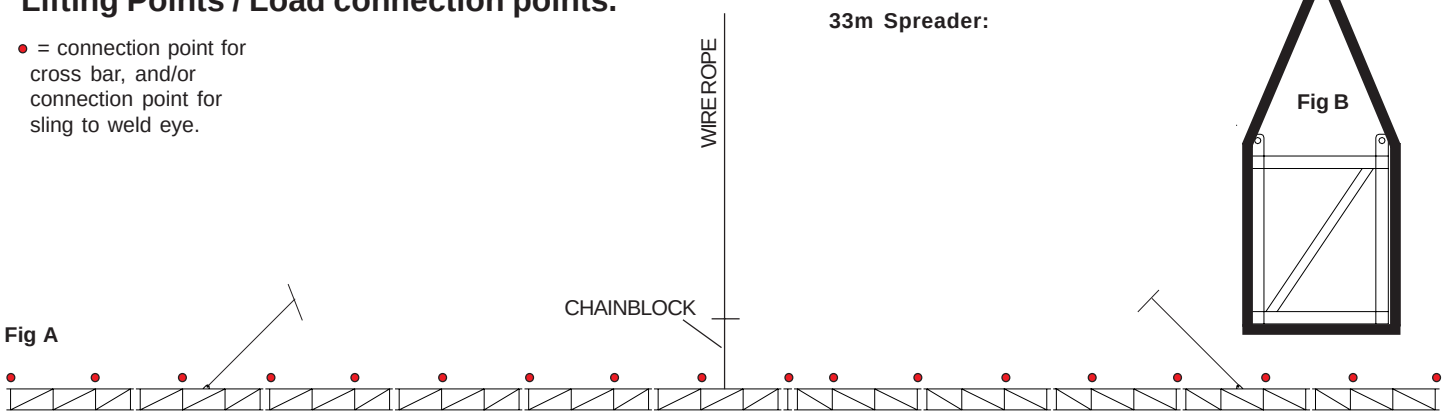
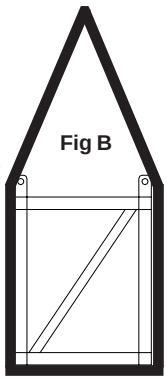


Fig A



1347 KG

ROUND/WEBBING SLING TO CONNECT BETWEEN CHAIN BLOCK AND SPREADER

44 Pins for Lattice Sections
36 Pins for Cross Bars

Rigging Assembly Instructions.

Connection between spreader and crane hook:

Outer slings:
2 no. 17.5m EWL Wire Rope Slings. These sling lengths are essential to ensure the Sling to Vertical Angle is less than 45 degrees.

Central Sling:
This sling is to support the weight of the spreader. Theoretical length: 12.2 metres.
Assemble chain block at bottom, wire rope at top (FIG A).
Connection of spreader to chainblock: Use Roundsling or webbing sling round the centre of the spreader, with both sling ends connected to chainblock (FIG B).
Set overall vertical length to 12.2m.
Lift up spreader (without load). Adjust chain block until spreader is horizontally level between the outer slings e.g. if the spreader sags between the outer slings, shorten chain block sling. If the spreader is inverted, lengthen chain block sling.
Look down end of spreader to check the level.
You may need to set the spreader back on the floor to do the adjustment each time, until it is correct.
The load can then be lifted.

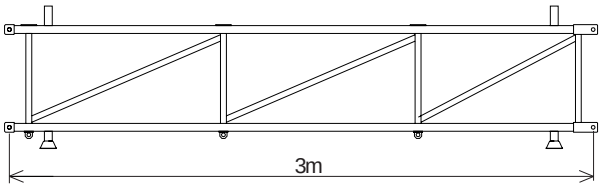
SAFE USE OF SPREADERS.

- ALL LIFTING OPERATIONS MUST BE PLANNED IN ACCORDANCE WITH 'LIFTING OPERATIONS AND LIFTING EQUIPMENT REGULATIONS 1998' (LOLER).
- A RISK ANALYSIS MUST BE COMPLETED.
- A METHOD STATEMENT SHOULD BE PRODUCED AND SEEN BY THE PERSONNEL USING THE EQUIPMENT.
- Adhere to the correct beam configuration when planning lift.
- Only the manufacturer's component parts must be used in beam assembly.
- Ensure components are connected/tightened sufficiently, and in good condition.
- Ensure all personnel are clear from lift path prior to commencing lift.
- Take load up steadily, ensure beam is level - never shock load the lifting rig.
- Use tag lines on load with sufficient length to stand well clear.
- Never leave a suspended load unsupervised.
- If components are lost, contact your supplier for replacements.
- Store beams and equipment safely when not in use.

USER INSTRUCTIONS - LATTICE SPREADER:33m

The Lattice System (MLS) is a light-weight modular spreader suitable for long, light loads, and has been specially developed to suit roofing sheets.
Maximum spans from 6m up to 42m in 3m increments are achievable using this system. Lower support slings can be attached to the frames every 2m to ensure a uniformly distributed load.

Components.



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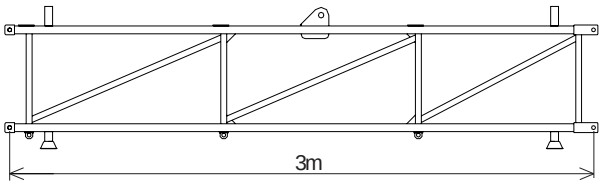

TYPE 2:
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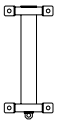
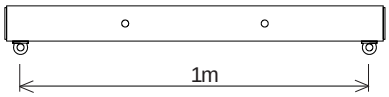
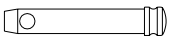


TYPE 3:
17.5 KG

FRAMES

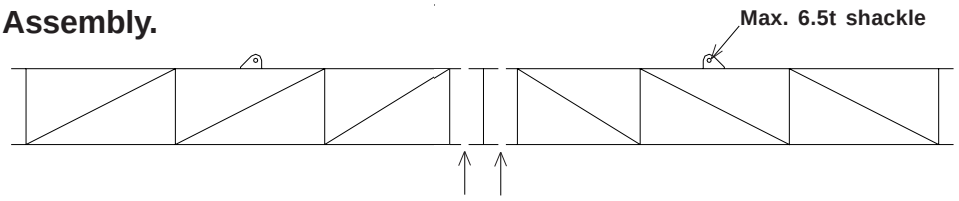


CROSS BAR: 7.5KG

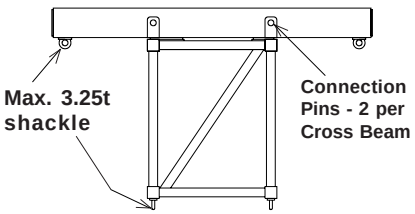


CONNECTION PIN

Assembly.



CONNECTION JOINTS - USE 4 no. CONNECTION PINS PER JOINT.



TYPICAL CROSS BAR CONNECTION

Spreader Specification.

- Rated at 2 tonnes WLL - Uniformly Distributed Load only (36m span).
- 'Sling to Vertical' angle, β, 45 degrees or less.
- Lifting points: Slings can be connected to weld eyes on ends of 1m span cross bars, or to weld eyes on underside of frames.
- Maximum length of load that can be lifted: 39m (1.5m overhang per end).

WARNING!

- Personnel using this system should be suitably trained, competent and have a clear under standing of Safe Slinging procedures, in accordance with the procedures laid down in 'Lifting Operations and Lifting Equipment Regulations 1998' (LOLER).
- THE SLING LENGTH IS CRITICAL TO THE SAFE USE OF THE SPREADER - THE 'SLING TO VERTICAL' ANGLE, β, MUST NOT BE MORE THAN 45 DEGREES.
- DO NOT EXCEED 2 TONNES, EVEN AT SHORTER SPANS.
- **The number of lifting points must not be less than shown in the diagram overleaf.**

USER INSTRUCTIONS - LATTICE SPREADER:33m

Configuration.

36m Spreader:

2	1	2	1	1	2	3	2	1	1	2	1	2

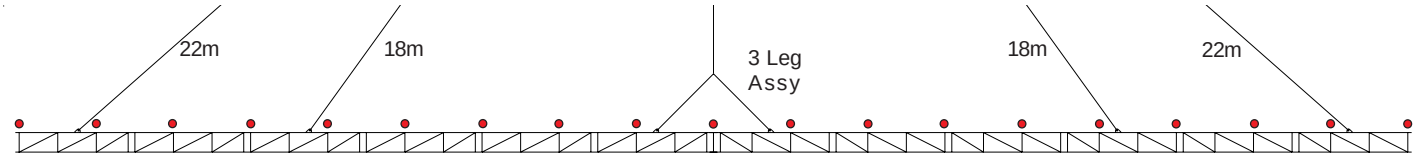
1 = Type 1 Frame x 6
2 = Type 2 Frame x 6
3 = Type 3 Frame x 1
No. of Crossbeams / Load connections = 19

Maximum 1.5m overhang of roofing sheet per end.

Lifting Points / Load connection points.

● = connection point for cross bar, and/or connection point for lower sling to weld eye.

36m Spreader:



1604 KG

HEIGHT OF RIG: 16m APPROX (Masterlink down to underside of lattice spreader)

48 Pins for Lattice Sections
38 Pins for Cross Bars

Loose Gear List.

2 x Wire Rope Sling - 22m long
2 x Wire Rope Sling - 18m long
1 x Centre Sling - 13m top section with 2 leg slings (2.6m length) connected via masterlink
6 x Single Leg Chain Sling nominally 2 metre bearing length with shortening clutches
1 x Masterlink
11 x 3.25t bow shackles
6 x 6.5 tonne bow shackles

Rigging Assembly Instructions.

1. Connect the masterlink to the crane hook.
2. Connect the shortest wire rope sling with the 2 short legs at the lower end, to the crane hook, using the 3.25t shackles.
3. Connect the mid length 18m slings to the masterlink either side of the centre sling with the 3.25t shackles.
4. Connect the longest , 22m, slings to the masterlink outside the mid length slings, with the 3.25t shackles.
5. Connect the 6 x 6.5t shackles to the top lifting lugs of the Type 2 lattice beam section.
6. Raise the crane hook until the wire rope slings hang free and are not twisted.
7. Connect the 6 x Single leg chain slings between the wire rope slings (using 3.25t shackles) and the 6.5t shackles.
8. Check that the chains are still fixed in the shortening clutches at about mid length on the chains.
9. Raise the crane hook to take up the slack of the sling system.
10. Again check that all the slings are not tangled.
11. Adjust the chain slings as necessary ensure that the lattice spreader is straight when it is lifted from the ground.
12. Check the spreader is straight when it is clear of the ground. This can be done be looking along the top surface of the spreader lining up a common feature on each section. Another feature to look along is the heads of the joint connecting pins.
13. If the spreader is not straight and level the slings should be adjusted to correct the sling length.
14. A small rise (20mm to 30mm) at each end of the spreader is acceptable.

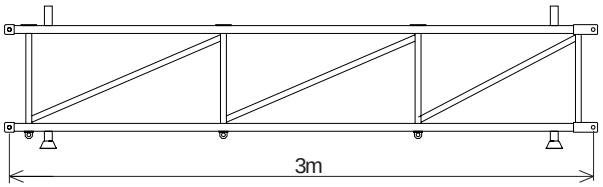
SAFE USE OF SPREADERS.

- ALL LIFTING OPERATIONS MUST BE PLANNED IN ACCORDANCE WITH 'LIFTING OPERATIONS AND LIFTING EQUIPMENT REGULATIONS 1998' (LOLER).
- A RISK ANALYSIS MUST BE COMPLETED.
- A METHOD STATEMENT SHOULD BE PRODUCED AND SEEN BY THE PERSONNEL USING THE EQUIPMENT.
- Adhere to the correct beam configuration when planning lift.
- Only the manufacturer's component parts must be used in beam assembly.
- Ensure components are connected/tightened sufficiently, and in good condition.
- Ensure all personnel are clear from lift path prior to commencing lift.
- Take load up steadily, ensure beam is level - never shock load the lifting rig.
- Use tag lines on load with sufficient length to stand well clear.
- Never leave a suspended load unsupervised.
- If components are lost, contact your supplier for replacements.
- Store beams and equipment safely when not in use.

USER INSTRUCTIONS - LATTICE SPREADER:42m

The Modulift Lattice System (MLS) is a light-weight modular spreader suitable for long, light loads, and has been specially developed to suit roofing sheets.
Maximum spans from 6m up to 42m in 3m increments are achievable using this system. Lower support slings can be attached to the frames every 2m to ensure a uniformly distributed load.

Components.



TYPE 1:
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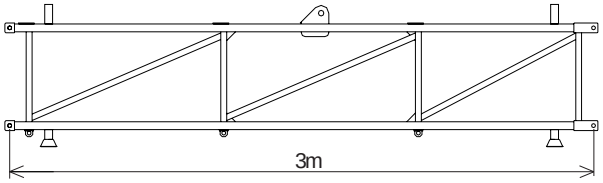

TYPE 2:
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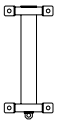
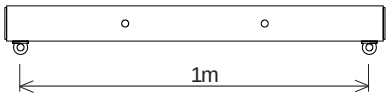
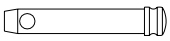


TYPE 3:
17.5 KG

FRAMES

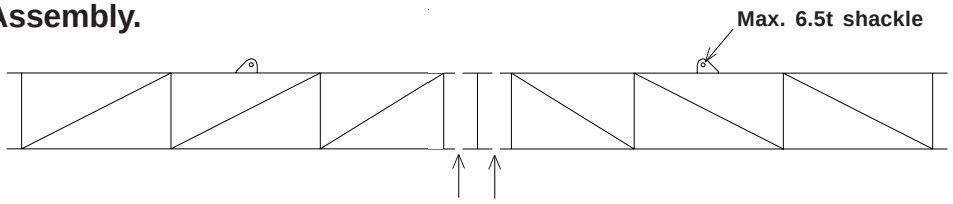


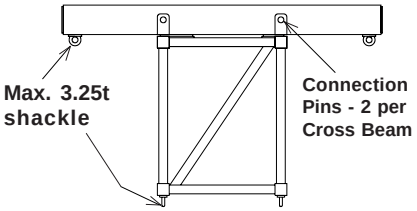
CROSS BAR: 7.5KG



CONNECTION PIN

Assembly.





TYPICAL CROSS BAR CONNECTION

Spreader Specification.

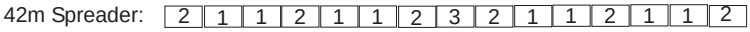
- Rated at 1 tonne WLL - Uniformly Distributed Load only (42m span).
- The sling arrangement must be rigged to the manufacturer instructions.
- The sling arrangement must not be modified without the manufacturers written approval.
- Lifting points: Slings can be connected to weld eyes on ends of 1m span cross bars, or to weld eyes on underside of frames.
- Maximum length of load that can be lifted: 45m (1.5m overhang per end).

WARNING!

- Personnel using this system should be suitably trained, competent and have a clear under standing of Safe Slinging procedures, in accordance with the procedures laid down in 'Lifting Operations and Lifting Equipment Regulations 1998' (LOLER).
- THE SLING LENGTH IS CRITICAL TO THE SAFE USE OF THE SPREADER - THE 'SLING TO VERTICAL' ANGLE, β, MUST NOT BE MORE THAN 45 DEGREES.
- DO NOT EXCEED 1 TONNE, EVEN AT SHORTER SPANS.
- **The number of lifting points must not be less than shown in the diagram overleaf.**

USER INSTRUCTIONS - LATTICE SPREADER:42m

Configuration.



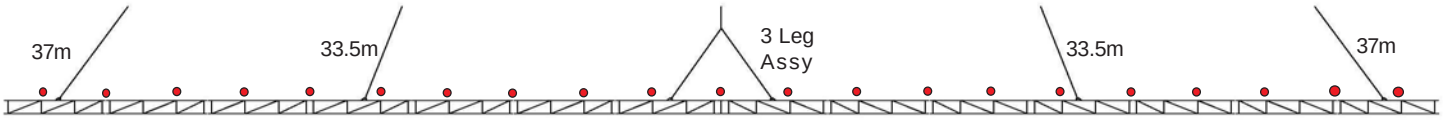
1 = Type 1 Frame x 8
2 = Type 2 Frame x 6
3 = Type 3 Frame x 1
No. of Crossbeams / Load connections = 21

Maximum 1.5m overhang of roofing sheet per end.

Lifting Points / Load connection points.

• = connection point for cross bar, and/or connection point for lower sling to weld eye.

42m Spreader:



1822 KG

HEIGHT OF RIG: 35m APPROX (Masterlink down to underside of lattice spreader)

56 Pins for Lattice Sections
42 Pins for Cross Bars

Loose Gear List.

2 x Wire Rope Sling - 37m long
2 x Wire Rope Sling - 33.5m long
1 x Centre Sling - 29m top section with 2 leg slings (3m length) connected via masterlink
6 x Single Leg Chain Sling nominally 2 metre bearing length with shortening clutches
1 x Masterlink
11 x 3.25t bow shackles
6 x 6.5 tonne bow shackles

Rigging Assembly Instructions.

1. Connect the masterlink to the crane hook.
2. Connect the shortest wire rope sling with the 2 short legs at the lower end, to the crane hook, using the 3.25t shackles.
3. Connect the mid length 33.5m slings to the masterlink either side of the centre sling with the 3.25t shackles.
4. Connect the longest , 37m, slings to the masterlink outside the mid length slings, with the 3.25t shackles.
5. Connect the 6 x 6.5t shackles to the top lifting lugs of the Type 2 lattice beam section.
6. Raise the crane hook until the wire rope slings hang free and are not twisted.
7. Connect the 6 x Single leg chain slings between the wire rope slings (using 3.25t shackles) and the 6.5t shackles.
8. Check that the chains are still fixed in the shortening clutches at about mid length on the chains.
9. Raise the crane hook to take up the slack of the sling system.
10. Again check that all the slings are not tangled.
11. Adjust the chain slings as necessary ensure that the lattice spreader is straight when it is lifted from the ground.
12. Check the spreader is straight when it is clear of the ground. This can be done be looking along the top surface of the spreader lining up a common feature on each section. Another feature to look along is the heads of the joint connecting pins.
13. If the spreader is not straight and level the slings should be adjusted to correct the sling length.
14. A small rise (20mm to 30mm) at each end of the spreader is acceptable.

SAFE USE OF SPREADERS.

- ALL LIFTING OPERATIONS MUST BE PLANNED IN ACCORDANCE WITH 'LIFTING OPERATIONS AND LIFTING EQUIPMENT REGULATIONS 1998' (LOLER).
- A RISK ANALYSIS MUST BE COMPLETED.
- A METHOD STATEMENT SHOULD BE PRODUCED AND SEEN BY THE PERSONNEL USING THE EQUIPMENT.
- Adhere to the correct beam configuration when planning lift.
- Only the manufacturer's component parts must be used in beam assembly.
- Ensure components are connected/tightened sufficiently, and in good condition.
- Ensure all personnel are clear from lift path prior to commencing lift.
- Take load up steadily, ensure beam is level - never shock load the lifting rig.
- Use tag lines on load with sufficient length to stand well clear.
- Never leave a suspended load unsupervised.
- If components are lost, contact your supplier for replacements.
- Store beams and equipment safely when not in use.