The pulley assembly may be placed anywhere on the truss.

The maximum load capacity for a vertical lift is 3,000 lbs. The trolley system is not designed for side loading and should never be used to pick up any load not aligned with the trolley. Horizontal members shall be placed at a maximum of every twelve (12) cups (69 inches apart).

Multiple hoists may be used for longer loads, as long as the total weight of 3,000 lbs. is not exceeded, or is designed by an Excel Engineer.

All material must be inspected prior to use! See inspection guidelines on page 99 of the standard manual.
The trolley hangs 27 to 29 inches below the top of the truss.

For greater load control, multiple I-beams may be grouped on a single truss.

Loads up to 6,000 lbs. can be lifted by two (2) trolleys under the following condition.
- The load must be evenly distributed to each trolley.

The following trusses meet the 6,000 lbs. capacity requirement:
- 4-foot, 5-foot, 8-foot, 9-foot, 10-foot, 12-foot.

See Note 1 below for other trusses.

Beam trolley splicing allows long runs of beams to be used to move loads greater distances.

**Note 1:**
Loads over 3,000 lbs. can be supported using adequate bracing and beam configuration. Consult an Excel Engineer for proper configuration and required bracing prior to installing.

**Note 2:**
All beam splices must be within eight (8) inches of a strap hanger and support truss. Beams may never be spliced in the middle of a run.
3/8 x 1-1/8 inch, grade 5 or stronger bolts shall be used for splicing.
### EXCEL MODULAR TROLLEY SYSTEM

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Galvanized Weight (lbs.)</th>
<th>Length Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTRLY</td>
<td>3,000 lbs. Trolley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTS</td>
<td>Beam Trolley Strap</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BTP</td>
<td>Beam Trolley Plate</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>HITCH-P</td>
<td>Hitch Pin</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BEM20</td>
<td>20' I-Beam (W6x9)</td>
<td>180</td>
<td>20</td>
</tr>
<tr>
<td>BEM13</td>
<td>13' I-Beam (W6x9)</td>
<td>99</td>
<td>13</td>
</tr>
<tr>
<td>BEM11</td>
<td>11' I-Beam (W6x9)</td>
<td>117</td>
<td>11</td>
</tr>
<tr>
<td>BEM9</td>
<td>9' I-Beam (W6x9)</td>
<td>81</td>
<td>9</td>
</tr>
<tr>
<td>BEM8</td>
<td>8' I-Beam (W6x9)</td>
<td>72</td>
<td>8</td>
</tr>
<tr>
<td>BEM7</td>
<td>7' I-Beam (W6x9)</td>
<td>63</td>
<td>7</td>
</tr>
<tr>
<td>BEM5</td>
<td>5' I-Beam (W6x9)</td>
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<td>5</td>
</tr>
<tr>
<td>EST1</td>
<td>End Stop with Fasteners</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BC1</td>
<td>Beam Connector with Fasteners</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

The beam hangers should be installed on the inside of the truss strap.

The end stop contains one (1) end-stop plate and two (2) bolts. Two (2) end stops are required for each trolley.

The beam connector contains one (1) connector plate and three (3) bolts. Two (2) connectors are required for each trolley connection.

**Example Material Requirements:**

**Trolley between two (2) Trusses:** (2) EST1, (4) BTP, (1) BEM (5, 7, 9, 11), BTRLY

**Two (2) Trolleys between two (2) Trusses:** (4) EST1, (8) BTP, (2) BEM(5, 7, 9, or 11), (2) BTRLY

**Trolley covering two (2) scaffold bays on Three (3) Trusses NO Splices:** (2) EST1, (6) BTP, (6) BEM (5, 7, 9, or 11), (1) BTRLY

**Trolley covering two (2) scaffold bays on three (3) Trusses with Splice Plates:** (2) EST1, (6) BTP, (2) BEM(5, 7, 9, 11) (!) BTRLY, (2) BC1

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All material must be inspected prior to use! See inspection guidelines on page 99 of the standard manual.

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**Notes:**

1) The trusses supporting the trolley system should not be used to support a scaffold board deck.
2) The trolley must not be allowed to pass the outer most truss.
3) The vertical support for the trusses must be designed to support the required loads.
4) All end stops and connector plates must be installed before the trolley system is used.
5) The trolley beam must be level when installed.
6) Do not substitute other components for connectors, end stops, trolley straps, bolts, etc.
7) Extra bracing is required when installing a trolley system. Bracing should be added to prevent shifting in the direction of movement.
8) Mechanical means shall never be used to move the load.
9) Sudden starts and stops must be prevented.

The trolley should be periodically maintained. If there are grease points, they should be filled with white lithium grease (ST-80 High-Performance Grease or equivalent).

Trolleys without grease points should be lubed with a 10-weight oil.

WD-40 can be used before application of grease or oil to loosen old grease and remove any rust buildup.

Unless a special beam is used or the maximum load decreased, regardless of the beam length, each trolley system beam must be supported with a beam trolley strap kit every seven (7) ft.