



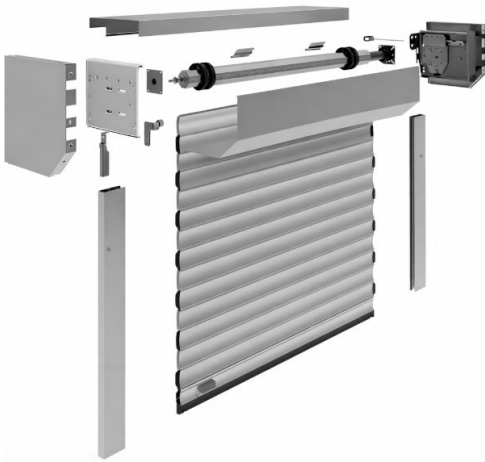
M A M M O T H

## TECHNICAL INSTALLATION MANUAL

Heavy Duty Aluminum Rolling Shutter System  
For Large Openings up to 9m (29.5ft) wide

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### System Overview



### Major Components

1. Panel Box (Hood)
2. Endplates / Mounting Brackets
3. Guide Rails
4. Roller Tube Assembly
5. Motor Drive
6. Idler Socket
7. Safety Brake
8. Curtain (Slats)
9. Panel Box Bottom Cover



## Safety Requirements

### **⚠ WARNING**

Mammoth shutters are **large structural systems**.

Improper installation may cause:

- serious injury
- structural failure
- product or property damage

## Minimum Installation Crew

### Unit Width Installers

< 5 m wide 3 installers minimum

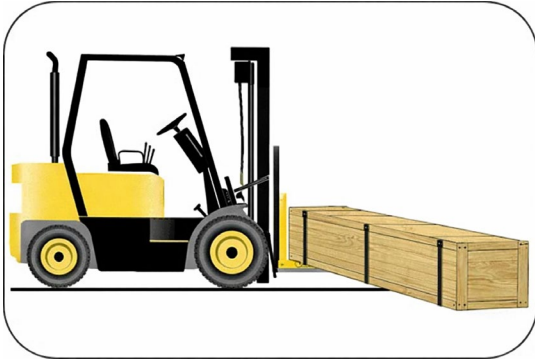
> 5 m wide 4 installers minimum

## Required Equipment

- Forklift or Material Lift
- Drill and impact driver
- Level and measuring tools
- Structural fasteners
- Socket and wrench set
- Hex Keys
- Grease may be helpful
- Screwdrivers
- Motor Tester Cable
- Pliers and Vice Grips



## Step 1 — Shipment Handling



Mammoth shutters ship in a **wood crate due to their size and weight.**

Typical dimensions:

Length: up to **9 m (30 ft)**

Weight: up to **450 kg (1000 lb)**

### Procedure

1. Inspect crate for transport damage.
2. Use **forklift with long forks.**
3. Support crate evenly along its length.
4. Move to installation location.

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## Step 2 — Unpacking and Component Verification

Carefully remove packaging and inspect components.

**Verify presence of, and measure against dimensions required by the Opening:**

- Panel Box Assembly
- Guide Rails
- Roller Tube Assembly
- Rollshutter Curtain
- Curtain Hangers
- Idler Socket
- Motor Assembly
- Fasteners (Special Flat Head Fasteners must be used for fastening the steel Brackets of a 360mm Panel Box) to ensure the fasteners do not interfere with movement of the curtain.



### Installation Tip

Leave protective film in place as long as necessary to protect the painted surfaces from damage while handling but remove while convenient.

### Factory Pre-Assembly

Units with **133 mm roller tube** ship with:

- Motor installed into Roller Tube
- Idler Socket installed into Roller Tube

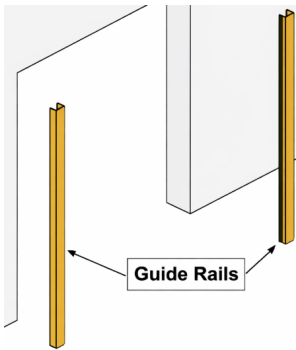
Units **>6.5 m width**

Panel box may be **factory spliced** in order to achieve the desired unit width.

Inspect splice connection before installation.

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### Step 3 — Guide Rail Installation



Guide rails establish the curtain travel path.

### Procedure

1. Position rails on each side of opening.
2. Confirm spacing matches specification.
3. Ensure rails are **plumb and parallel**.
4. Use appropriate Fasteners for attachment.

### Installation Tip

Leave **top fasteners slightly loose**.

This allows movement during panel box installation.



Building Substrate	Recommended Fastener Type	Minimum Diameter	Minimum Embedment / Engagement	Typical Spacing	Notes
<b>Wood (Structural Framing)</b>	Structural lag screw or structural wood screw (ex: Simpson SDS, GRK RSS)	5/16" – 3/8"	2.5" – 3" into solid wood	12"–16" OC along rails	Pre-drill pilot holes. Avoid fastening into sheathing only. Must engage studs or blocking.
<b>Steel (Structural Steel ≥ 3mm / 1/8")</b>	Self-drilling TEK screw (bi-metal) or machine bolt with tapped hole	#14 TEK or 5/16" bolt	Full thread engagement through steel	12"–16" OC	For heavy doors, bolts with locknuts preferred where accessible.
<b>Steel (Thin Gauge ≤ 14ga)</b>	Through-bolt with backing plate	5/16" – 3/8" bolt	Full penetration with washer plate	12"–16" OC	Avoid relying only on TEK screws in thin steel for heavy wind loads.
<b>Concrete (≥3000 psi)</b>	Wedge anchor or screw anchor (ex: Hilti Kwik Bolt, Tapcon Heavy Duty)	3/8" – 1/2"	2.5" – 3.5" embedment	12"–16" OC	Torque to manufacturer spec. Avoid anchoring close to edges (<3").
<b>Concrete Block (CMU)</b>	Sleeve anchor or adhesive anchor with threaded rod	3/8" – 1/2"	3"–4" embedment	12" OC	Prefer grout-filled cells when possible.
<b>Brick</b>	Sleeve anchor or adhesive anchor	3/8"	2.5" – 3"	12" OC	Drill into brick body, not mortar joints.
<b>Structural Concrete / Masonry for Endplates/ Brackets</b>	Wedge anchor or epoxy anchor with threaded rod	1/2"	3.5" – 4" embedment	4 anchors per bracket typical	Headplates carry concentrated load.

#### Step 4 — Panel Box Placement

**⚠ Leave Panel Box Bottom attached during lifting.**

This increases rigidity of the assembly.

#### Installation Tip

Drill exit holes for motor cable and safety brake cable before lifting Panel Box into position. Use appropriate bushings to protect the cable.

#### Procedure

1. Lift panel box assembly.
2. Align **endplate legs with guide rails.**
3. Slide legs into guide rails.

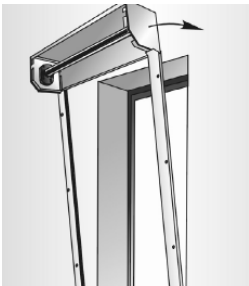


Ensure correct orientation before fully seating.



### Installation Tip

If the Panel Box will be installed tight under header or ceiling, you may have to tilt the box and rails into position while connected. It is important to sufficiently support the panel box keeping it aligned with the guide rails if this method is utilized.



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### Step 5 — Guide Rail Final Tightening

After panel box seating into Guide Rails:

1. Verify rails remain **parallel and plumb**.
2. Tighten all fasteners.
3. Confirm guide rails support panel box properly and that back of box is aligned with back of guide rails.

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### Step 6 — Panel Box Bottom Removal

The panel box bottom must be removed to install the roller tube.

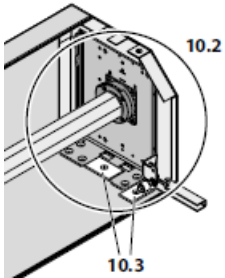
#### Procedure

1. Remove fasteners at endplates.
2. Remove screws along the width at top where the Panel Box Bottom Connects to the Panel Box Top.
3. Carefully lower bottom panel supporting it to ensure it does not bend or crease while handling.

**⚠ Handle carefully — large, flexible, fragile, component. More than 2 people will be required.**



## Step 7 — Structural Mounting



Endplates and Steel Brackets carry the **entire system load**.

### Installer Responsibility

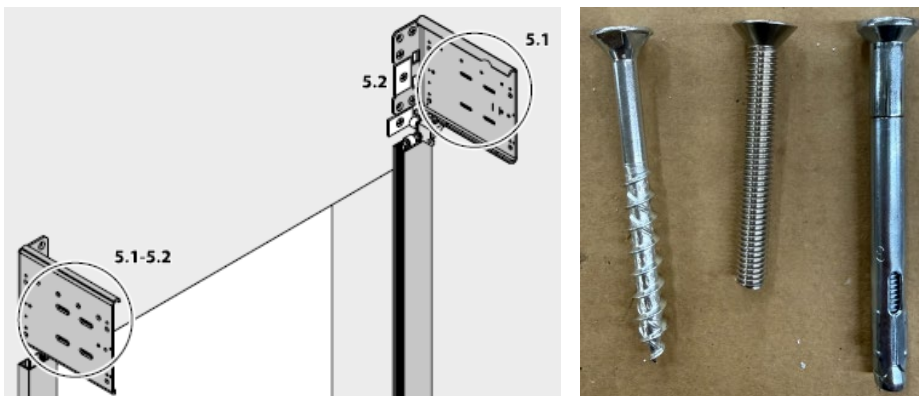
Ensure structure, building substrate, and fastening method, can support:

- unit weight
- wind loads
- operational loads

Consult factory if uncertain.

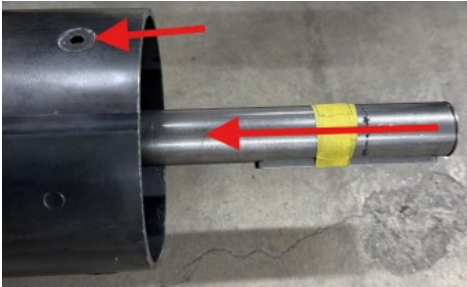
Panel Box Top and Back fasteners are **cosmetic only**. Ensure the fasteners used do not interfere with travel of the curtain.

⚠ **In the case of a 360mm Panel Box**, there will be Steel CCM Brackets with Countersunk Holes for mounting. Talius has provided the appropriate flat head fasteners which ensure the curtain's travel will not be interfered with by the fasteners. If additional attachment points or different fasteners are necessary, it is the responsibility of the Installer to ensure sufficient structural attachment.





### Step 8 — Idler Socket Preparation



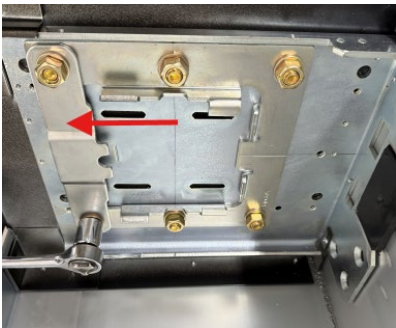
Remove fasteners attaching **idler socket to roller tube**.

Slide socket **inward** to allow clearance during installation.

Ensure socket remains **accessible**.

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### Step 9 — Motor Bracket Preparation



Remove:

- motor bracket clamping plate

This allows the roller tube with motor to slide into position.



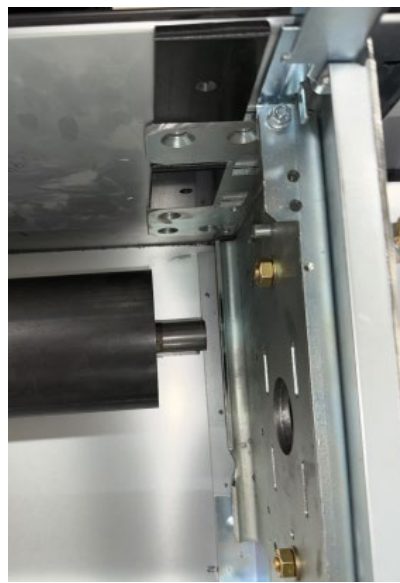
## Step 10 — Roller Tube Installation



Lift roller tube using **forklift** or **material lift**.

### Procedure

1. Align tube with panel box opening.
2. Rotate Roller Tube assembly to position motor cable and any Manual Override as desired
3. Slide tube between endplates.





### Motor Side

Engage motor head with motor bracket.

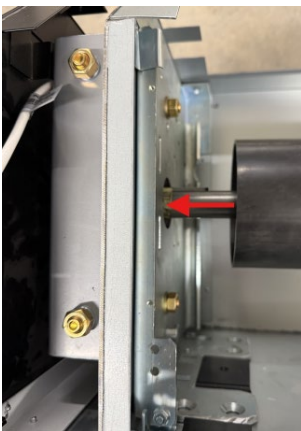
Reinstall **motor bracket clamp plate**.

Tighten securely.

⚠ Roller tube must remain **level and centered**.



### Step 11 — Idler End / Safety Brake Installation



Slide idler socket outward and engage shaft into **safety brake**.



### Installation Tip

Use Grease to Lubricate the Idler Socket in order to make it easier to slide into the Safety Brake. Loosening of the Fasteners that secure the safety brake may also be necessary.

### Alignment

Rotate safety brake keyway until it aligns with the Idler Socket shaft key.

Ensure:

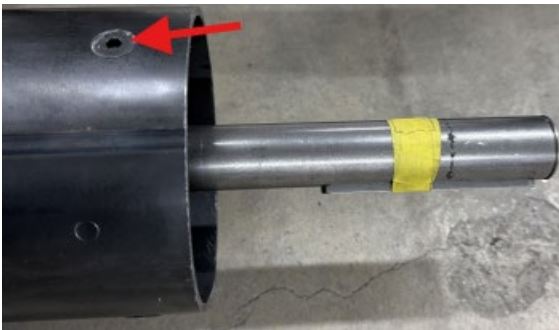
- brake fully supports shaft
- shaft fully engages brake

### Secure Idler

Align holes between roller tube and idler socket.

Install fasteners using **Loctite thread locker**.

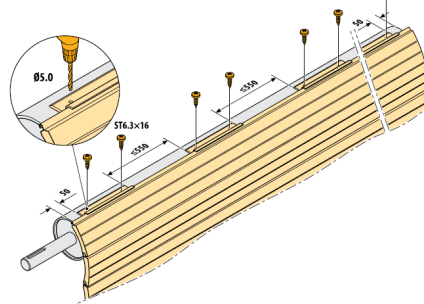
Tighten securely.





## Step 12 — Curtain Installation

The curtain will attach to the Roller Tube using curtain Hangers or, in the case of a 133mm Tube, Retainer Profiles.



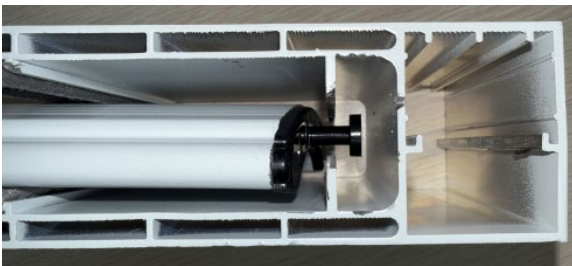
Lift Rollshutter curtain using **forklift or material lift**. Ensure the curtain is protected from damage with packing materials.

### Procedure

1. Rotate Roller Tube with the motor to position it so that the attachment points are accessible. Tester Cables may be used to temporarily power the motor for this purpose.
2. Slide Retainer Profiles or Curtain Hangers onto top profile of curtain
3. Align Curtain with panel box opening, centering it.
4. Lift Top profile of curtain up and over the back side of the roller tube and align with attachment points.
5. Secure with fasteners and locktite.
6. Using the tester cables, rotate the roller tube in the upward direction carefully guiding and unwinding the curtain from the forklift or material lift platform.

**⚠ Be certain to protect the back side of the curtain against scratches where it could contact the guide rails or other protrusions.**

7. Continue until curtain is completely rolled onto roller tube.
8. Guide Bottom Profile into Guide Rails and lower the curtain ensuring the curtain is centered and that the windlocks, if equipped, enter the correct location in the guide rail.





### Step 13 — Motor Limits and Testing

Follow instructions specific to motor supplied.

Use Tester Cables to provide temporary power.

Set motor limits for:

- fully open
- fully closed

Operate shutter through **several cycles**.

### Step 14 — Electrical Installation

Electrical work must be performed by **qualified personnel**.

#### Procedure

1. Follow appropriate schematics
2. Connect Motor & Safety Brake wiring.
3. Verify voltage compatibility.
4. Install control system.

Disconnect power during installation.

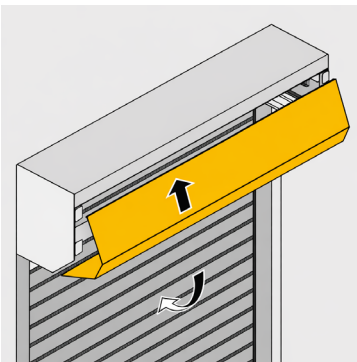
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### Step 15 — Reinstall Panel Box Bottom

Reinstall the hood bottom panel.

Secure with original fasteners.

Ensure panel is aligned and secure.





## Final Installation Inspection

Verify:

- ✓ rails secure
- ✓ endplates anchored
- ✓ roller tube secure
- ✓ safety brake engaged
- ✓ curtain centered and moving freely
- ✓ motor limits set
- ✓ covers installed
- ✓ protective film removed