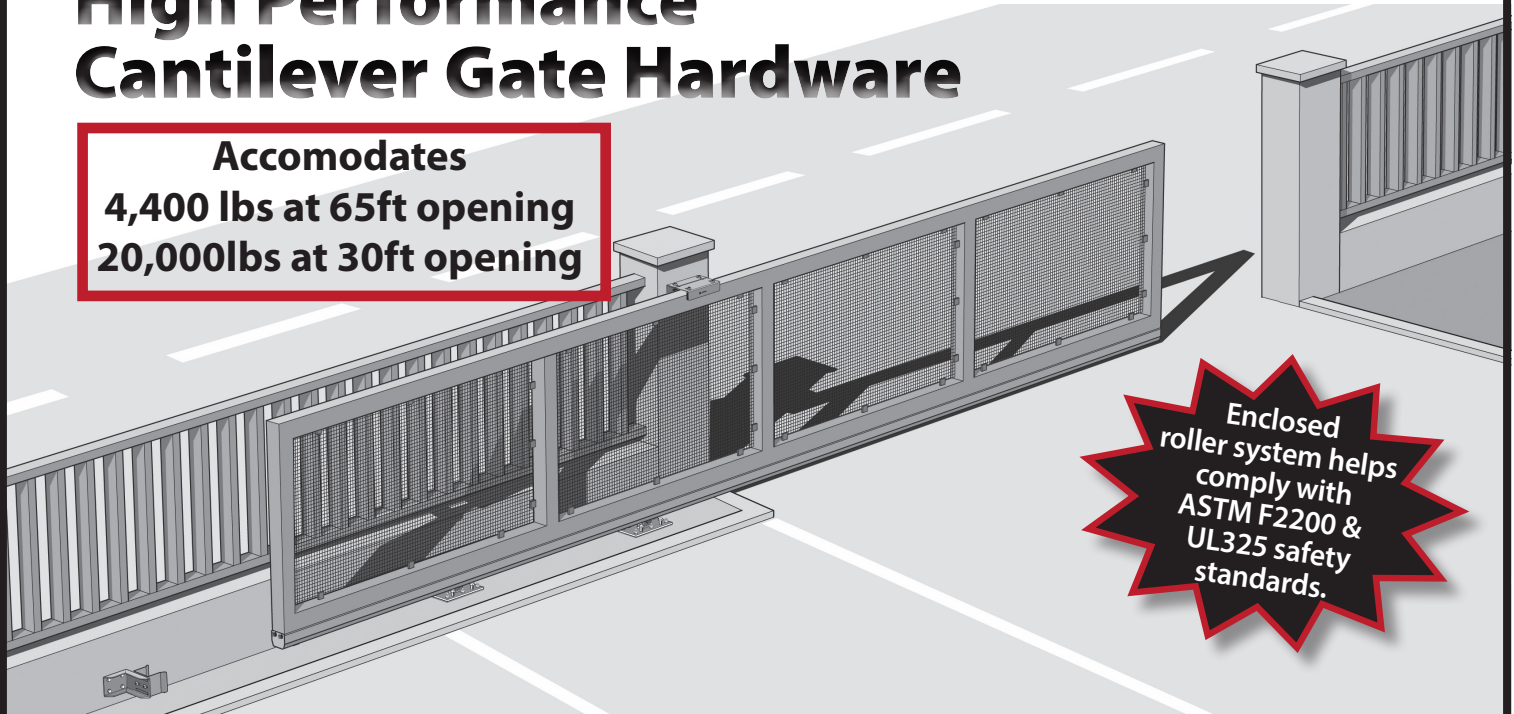


# High Performance Cantilever Gate Hardware

Accommodates  
4,400 lbs at 65ft opening  
20,000lbs at 30ft opening



Enclosed  
roller system helps  
comply with  
ASTM F2200 &  
UL325 safety  
standards.

## Cantilever Gate Trussing

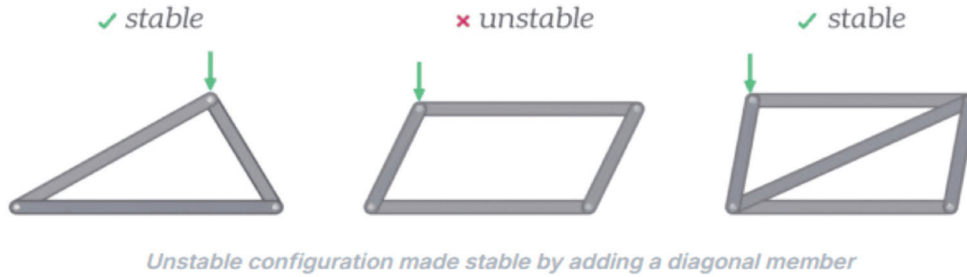
### Why is Truss Support Important for Cantilever Gates?

Cantilever gates are only mounted to the ground on one side and "stick out into space" on the side of the opening. The full weight of the gate is constantly being pulled down by gravity.

The rectangular gate frames are not strong enough by themselves to counter this gravitational force, leading them to slowly bend towards the ground.

Adding vertical support at certain intervals and diagonal trussing to the frame increases its ability to resist gate sag.

## How Does a Truss Work?



A truss uses diagonal supports to distribute weight and prevent sagging. The diagonal members connect, forming a series of interconnected triangles that resist forces pushing or pulling the gate out of shape.

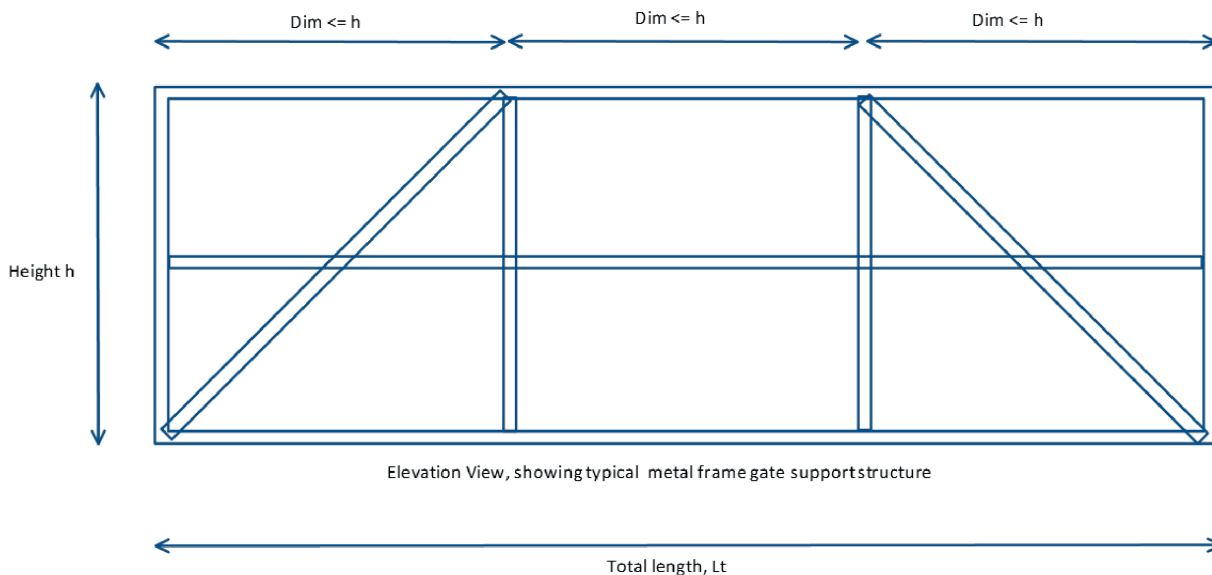
ALL cantilever gates must be made and trussed in a way that allows them to be self-supporting. The Durgagates track is designed and built to support the weight and balance of the gate but will not support gates that are not trussed to prevent sagging or curling, or are not in and of themselves self-supporting.

Lateral support is added to a gate in one of three ways:

1. A truss system protruding 12 inches and running the length of the gate
2. A rectangular tube (like a 2x6) attached flat to the gate top
3. A double track cantilever system with a track on both sides of the gate

## 3 Cantilever Gate Design Best Practices

1. Horizontal/lateral trusses should be used for picket style gates with openings longer than 26 ft or gates with a total length over 40 ft.
2. Space out horizontal support members at intervals roughly equal to the height of the gate.





**3 Cantilever Gate Design Best Practices (continued)**

3. Add diagonal bracing from corner to corner in gate section(s) to add vertical strength to the gate.



**Typical:** Diagonal trussing in the vertical dimension is needed for all gates. A simple diagonal in the tail section will work for many “smaller” gates.



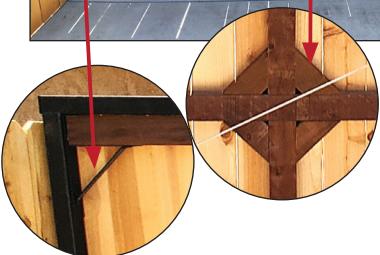
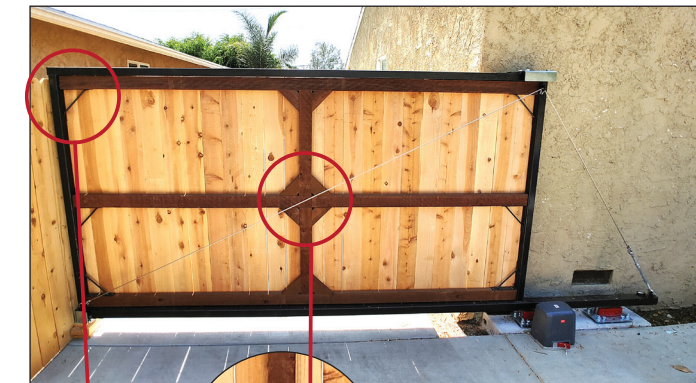
**Better:** One diagonal brace in each gate section, is recommended for large gates with a 30 ft or greater opening.



**Best:** “X” bracing in each section of the gate, which is best for large, heavy gates.



Long gates also need lateral trussing to resist wind and the tendency to “lean over” to one side. Often referred to as a “strong arm” support, this is a 1 ft wide “panel” attached perpendicular to the gate, running the full length of the gate. This is especially important for privacy style gates, or any gate with significant infill to catch the wind.



Another alternative to full diagonal supports is to put triangular gussets welded in the corners next to the vertical uprights.