SWIFT FLATBED

FLATBED

TIE DOWN PROCEDURES

Version 11082018

Change History

Overview The table below logs the changes made to this document over time.

Ver.	Changes	Author	Approved by	Date approved
1.1	Original Release Date	QA	QA	1-1-1992
1.2	2nd Revision			5-1-1997
1.3	3rd Revision			12-1-1997
1.4	4th Revision			8-1-1998
1.5	5th Revision			1-1-2001
1.6	6th Revision			9-1-2004
1.7	• Updated cover page • New format created • Deleted specific content per Flatbed leadership	BT	BS	12-1-2016
1.8	• Replaced outdated photos	BT	BS	5-23-2017
1.9	• Changed verbiage on CA Federal Bridge Formula • Removed specific contact names	BT	BS	8-29-2017
2.0	•			

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INTRODUCTION TO FLATBED

Section Overview

In this section The table below lists the topics in this section.

INTRODUCTION TO FLATBED

As a professional flatbed Driver your job is to deliver your cargo safely, damage free, and on time. Once the cargo is placed on your trailer and the shipping papers are signed, you "own" the cargo and you are fully responsible for its safe and damage free delivery - from the point of origin to final destination.

Preventing cargo loss is one of your most important responsibilities. Cargo claims hit you square in the pocket. Company money spent on claims means less money for wages and Driver benefits. You could also suffer injury and lost wages should you have an accident due to improperly secured cargo.

Securing your load properly is important. Unsecured, falling and shifting cargo can cause incident, accidents, injury and death! It's your responsibility. Properly secured loads help prevent accidents, helps prevent lost and damaged cargo, help prevent steering problems from shifting or improperly distributed freight, reduces delays in delivery and puts money in the Driver's pocket.

EACH LOAD WILL REQUIRE COMMON SENSE IN THE METHOD USED TO TIE DOWN THE LOAD.

BASIC DAILY FACTS:

- Try to unload early in the day.
- Try not to have full fuel tanks prior to loading (1/2 - 5/8 max) - this could place you over weight after loading. **However, if you are getting a wood load, call your Driver Manager. Your manager will most likely tell you to top off and get an empty weight scale ticket after topping off**.
- Keep your Driver Manager updated as to your status.
- Be available to haul any type of load, anywhere as needed- you have all your equipment.
- Contact Driver Manager with problems and/or questions.
- Read your bill of lading, know what you are hauling, and if confused, call your Driver Manager.
- Scroll past basic load information on your computer screen to receive "specialized load instructions".
- TARP loads for protection from the weather.
- Protect your equipment from theft and damage by locking your lockers/boxes.

FLATBED RULES AND REGULATIONS

1. When performing pre-trip inspections on flatbed trailers, find the registration, pay special attention to side rail damage, cracks, structural problems and weak or broken decking.
2. Equipment that is placed out-of-service or red-tagged, cannot be used unless shop management makes approval.
3. Flatbed or drop deck loads must be checked and adjusted: 25 to 50 miles of your loading point, ADDITIONAL CHECKS MUST BE PERFORMED AT 150 MILES OF DRIVING OR THREE (3) HRS OF DRIVING OR EVERY CHANGE OF DUTY STATUS WHICHEVER COMES FIRST. THIS MUST BE REPEATED THROUGHOUT YOUR TRIP. NOTE- Never adjust load on the shoulder of the road, UNLESS AN EMERGENCY DICTATES OTHERWISE.
4. Safety glasses are required when using bungee cords to tie down tarps. The Company issues hard- hats and safety glasses and their use is required.

INTRODUCTION TO FLATBED

AT THE SHIPPER

- **Inspect** all cargo before it is loaded when possible. Drivers should contact their Driver Managers tie down instructor or mentor with any problems.
- **Watch** out for loading area hazards. Make sure your vehicle is secure from moving, and you are conscious of your personal safety. Follow all customer and Swift safety requirements and procedures.
- **Supervise** all loading activity. Make sure all cargo listed on bill of lading and other shipping documents matches what is actually loaded on the trailer. You must report discrepancies immediately.
- **Make sure** the cargo is loaded properly. Drivers need to ensure the cargo is evenly distributed throughout the trailer, and that lighter cargo is stacked on top of heavier freight. If you do not like the way it is loaded, have them fix it. If they refuse, call your Driver Leader.

DEFINITION OF TERMS

Aggregate working load limit	Means, the sum of the working load limits or *restraining capacity* of all devices used to secure an article of cargo.
Anchor point	Means, the part of the structure, fitting or attachment on a vehicle or article of cargo to which a tie down is attached.
Banding	Is, a strip of material that may be used to unitize articles and is tensioned and clamped or crimped back upon it.
Binder	Is, a device used to tension a tie down or combination of tie downs.
Blocking	Is, a structure or device placed against or around an article of cargo to prevent horizontal movement.
Bracing	Means, a structure or device placed against and article of cargo to prevent it from shifting or tipping.
Bulkhead	Is, a vertical barrier across a vehicle to prevent forward movement of cargo.
Chock	Is, a tapered or wedge-shaped piece used to secure round articles against rolling.
Cleat	Means, a short piece of material, usually wood, nailed to the deck of a trailer to reinforce blocking.
Coil rack	Is, a device that is used to keep metal coils in place, and prevent them from rolling.
Deck	Is, the floor of a truck, trailer or intermodal container.
Dunnage	Means, all loose material used to support and protect cargo.
Edge protector	Is a device placed on the exposed edge of an article to protect the tie down and / or cargo from damage, and to allow the tie down to slide freely when being tensioned.

Intermodal Container	Is a reusable, transportable enclosure that is especially designed with integral locking devices that secure it to a container chassis trailer to facilitate the efficient and bulk shipping and transfer of goods by, or between various modes of transport, such as highways, rail, sea and air.
Lift	Is a tier of dressed timber, steel or other materials.
Pallet	Is a platform or tray on which cargo is placed so that it can be handled as an article.
Rub rail	Is a rail along the side of a vehicle that protects the side of the vehicle from impact.
Skid	Is a platform or tray on which cargo is placed so that it can be handled as an article.
Tie down	Is a combination of securing devices, which form an assembly that, attached cargo to, or restrains cargo on, a vehicle or trailer, and is attached to anchor points.
Winch	Is a device for tensioning a webbing or wire rope tie down that is fitted with means to lock the initial tension.
Working load limit	Is the maximum load that may be applied to a component of a cargo securement system during normal service, usually assigned by the manufacturer of the component.

FEDERAL RULES AND REGULATIONS

393.100

According to the regulations, each commercial motor vehicle must, when transporting cargo on public roads, be loaded and equipped in such a manner as to prevent the cargo from leaking, spilling, blowing or falling from the motor vehicle. In addition, the cargo must be contained, immobilized or secured in such a manner as to prevent shifting upon or within the vehicle to such an extent that the vehicles stability or maneuverability is adversely affected.

393.102

Performance Criteria

Cargo securement devices and systems must be capable of withstanding the following three forces, applied separately:

1. 0.8g deceleration in the forward direction;
2. 0.5g acceleration in the rearward direction; and
3. 0.5g acceleration in the lateral direction.

INTRODUCTION TO FLATBED

Use of Tie Down

1. Each tie down must be attached and secured in a manner that prevents it from becoming:
   - loose,
   - unfastening
   - opening or releasing while the vehicle is in transit.
2. All tie downs and other components of a cargo securement system used to secure loads on a trailer equipped with rub rails, must be located inboard of the rub rails *whenever practicable.*
3. Edge protection must be used whenever a tie down would be subject to abrasion or cutting at the point where it touches an article of cargo. The edge protection must resist abrasion, cutting and crushing.

393.106

Articles of cargo that are likely to roll (such as large steel coils or concrete pipe) must be restrained by chocks, wedges or other equivalent means to prevent rolling. The means of preventing rolling must not be capable of becoming unintentionally unfastened or loose while the vehicle is in transit.

Articles of cargo placed beside each other and secured by transverse (crosswise) tie downs must either:

- Be placed in direct contact with each other, or
- Be prevented from shifting toward each other while in transit.

Total Working Load Limit

Total working load limit of any securement system used to secure an article or group of articles against movement must be at least one-half (1/2) times the weight of the article or group of articles. The total working load limit is the sum of:

- One-half of the working load limit of each associated connector or attachment mechanism used to secure a part of the article of cargo to the vehicle; and
- One-half of the working load limit for each section of a tie down attached to an anchor point.

Example:	If you pick up a load that weights 40,000 lbs., and you secure the load with straps, you will need to use no less than four straps on the load. 4 x 5,000 lbs., (the working load limit of the strap) equals 20,000 lbs., which is half the weight of the load. This would be the MINIMUM AMOUNT OF SECUREMENT, BASED ON DOT RULES.

FLATBED EQUIPMENT

Section Overview

In this section The table below lists the topics in this section.

FLATBED EQUIPMENT

CHAINS

1. Truck chains bear a chain grade identification mark on the link, i.e. "G70". Swift uses **5/16 grade 70 chain** with a safe working load limit of **4,700 lbs.**

STRAPS

1. Swift uses 4 in. web straps. Each strap should have a manufactures tag stating the working load limit of **5,000 lbs.** Without the manufactures tag, the working load limit will drop to **4,000 lbs.**
2. 2" Ratchet Strap with a **3,335lbs** working load limit. If not marked then working load limit is **2000 lbs.**

ROPE

1. Synthetic cordage (black with orange) **1/2 in. diameter** has a rated capacity of **625 lbs.**

393.108

As far as the specific number of tie downs needed for a given load, the regulations provide the following requirements. In addition to the requirements of 393.106, the minimum number of tie downs required to secure an article or group of articles against movement depends on the length of the article(s) being secured.

393.110

When an article is not blocked or positioned to prevent movement in the forward direction by a header board, bulkhead, other cargo that is positioned to prevent movement, or other appropriate blocking devices, it must be secured by at least:

- One (1) tie down for articles five (5) feet or less in length, and 1,100 pounds or less in weight.
- Two (2) tie downs if the article is:
  1. Five (5) feet or less in length and more than 1,100 pounds in weight; or
  2. Longer than five (5) feet but less than or equal to 10 feet in length, irrespective of the weight.
- In addition, two (2) tie downs are required if the article is longer than 10 feet, and one (1) additional tie down for every 10 feet of article length, or fraction thereof, beyond the first 10 feet of length.

Example:	On 23 ft. length of pipe, 4 tie downs are required. Two (2) for the first 10 ft., one (1) for the next 10 ft., and one (1) additional tie down for the remaining three (3) foot fraction.

Hauling cargo on flatbed trailers requires more attention to tie downs than with other trailer types. Tie downs such as chains, wire rope, steel strapping and fiber robe serve critical functions in keeping cargo in place and preventing incidents. Drivers must know the working load limits of the tie downs they use. In addition, Drivers must also know how many tie downs are required for a given load.

FLATBED EQUIPMENT

TYPES OF TIE DOWNS USED (CHAINS OR STRAPS)

- **CIRCLE WRAP** – A circle wrap is used to hold loose items together.
- **BELLY WRAP** – A belly wrap is used to secure the bottom part of a load to build a firm foundation for the rest of the load to set on. (Layered loads that are more than 2 lifts and 6 ft. or higher must use belly wraps).
- **MAIN TIE DOWN** – A main tie down would be the tie down that is used to go over the top of a load, to hold down the entire load.

FLATBED TIE DOWN EQUIPMENT

COMPANY REQUIRED EQUIPMENT:

1. Hard Hat, Safety Glasses, Steel Toe Boots, Safety Vest and Ear Protection
2. 16 - Chains & Binders
3. 1 - Winch Bar
4. 8 - Tarp Protectors
5. 16 - Chain Protectors
6. 20 - Edge Protectors
7. 20 - 1 X 3ft. V-boards
8. 20 – 4” Load Straps
9. 4 – 2” Load Straps
10. 4 – 4 ” Ratchet for Strap
11. 4 – 2” Ratchet for Strap
12. 2 - Lumber Tarps (1 set)
13. 2 - Steel Tarps (1 set)
14. 1 – Strap Winder
15. 100 - Tarp Rubber Straps (Bungees)
16. 8 - 4 ft. 4 x 4 Beveled Hardwood Lumber
17. 8 - Coil Racks
18. 8 - Coil Mats
19. 2 - Oversize Load Signs
20. 2 – Pole Red Flags
21. 4 – Hanging Red Flags
22. 1 - Light Bar
23. 1 – Reflective Warning Triangles
24. 1 – Fire Extinguisher
25. 12 - Tire Lassos

RECOMMENDED DRIVER PURCHASES EQUIPMENT:

1. 2lb. Hammer Sledge
2. Tape Measure - 25 ft. or longer
3. Crowbar
4. Roll of Duct Tape
5. Container of Nails (3”)
6. Hand Saw
7. Multifunctional Ladder
8. Pole for Belly Wraps
9. Flashlight
10. Rope

FLATBED COMPANY REQUIRED EQUIPMENT

PPE PROVIDED BY SWIFT:

Your basic PPE includes:

- Vest
- Helmet – you might fit a string to it as a chin strap
- Safety Glasses
- Steel Toe Boots
- Hearing Protection – **Circled in red**

FLATBED COMPANY REQUIRED EQUIPMENT

BINDER

WINCH BAR

CHAIN

EDGE AND CORNER PROTECTION

CHAIN PROTECTOR IN USE

EDGE PROTECTION

FLATBED COMPANY REQUIRED EQUIPMENT

3’ V-BOARD

4” STRAP

2” RATCHET BINDER & STRAP

4” RATCHET BINDER & STRAP

LUMBER TARP 25’ X 24’ W/ FLAP

STEEL TARP 25’ X 17’ 6”

FLATBED COMPANY REQUIRED EQUIPMENT

STRAP WINDER

TARPING STRAP "BUNGEE"

4 ft. 4 X 4 BEVELED HARDWOOD LUMBER

COIL RACK

COIL MAT

OVERSIZE LOAD SIGN

FLATBED COMPANY REQUIRED EQUIPMENT

RED FLAG ON A POLE

HANGING RED FLAG

LIGHT BAR FOR OVER-SIZE LOADS

REFLECTIVE WARNING TRIANGLES

FULLY-CHARGED FIRE EXTINGUISHER

TIRE LASSO FOR MOVING VEHICLES

FLATBED RECOMMENDED DRIVER PURCHASES EQUIPMENT

2 LB SLEDGE HAMMER AND
25' TAPE MEASURE

24" CROWBAR

DUCT TAPE

FLATBED RECOMMENDED DRIVER PURCHASES EQUIPMENT

CONTAINER OF NAILS

3 IN NALS BUT AN ASSORTMENT BETTER

10 IN. PULL SAW – CUTS ON THE PULL

FLATBED RECOMMENDED DRIVER PURCHASES EQUIPMENT

MULTIFUNCTIONAL LADDER

The ladder opens to an "A" with extendable legs or a straight extension ladder. You can get on a tall load by putting it on the truck's catwalk.

PAINTERS' POLE

FLATBED RECOMMENDED DRIVER PURCHASES EQUIPMENT

SMALL YET POWERFUL FLASHLIGHT

ROPE

FLATBED EQUIPMENT

BASIC CONCEPTS OF TARPING

BEWARE OF TARPING IN HIGH WINDS. GET HELP IF POSSIBLE OR FIND A SHELTERED AREA TO TARP.

SELECTING TARP

- Choose the right tarp for the job. It doesn't make sense to use a square cornered wall board tarp on a rounded flatbed load. It's difficult to get good tie-down to prevent billowing when the tarp doesn't fit.

DAMAGED TARPS

- If the tarp is damaged, notify your driver manager and arrange for you to exchange your tarp.

PADDING

- Tarps do a great job resisting tearing and rubbing, but give them a chance to do their best. Pad all sharp corners and edges. A moving blanket does a great job.

SECURING TARP

- Never secure the load over the tarp, unless instructed to do so. Always secure the load first, then, tarp the load.
- Keep the tarp under slight, but firm tension.
- Tuck corner tabs under the end flap. Loose corner tabs act like scoops, drawing dirt and moisture into the load.
- Use ropes to prevent billowing on odd-shaped loads.

INSPECTION

- Frequent inspection is the best way to catch minor tears and pin holes before they become more serious and costly.

MAINTENANCE, CLEANING and STORAGE

- Normal over-the-road use will eventually show on any tarp. When repairs are needed, time and money can be saved be getting worn tarps to your equipment manager for timely repairs.
- Keep your tarp clean. Caked on grime can eventually shorten a tarps service life. Clean every 3 to 6 months. Do not use harsh cleaning solutions.
- When possible, always dry your tarp before you store it.

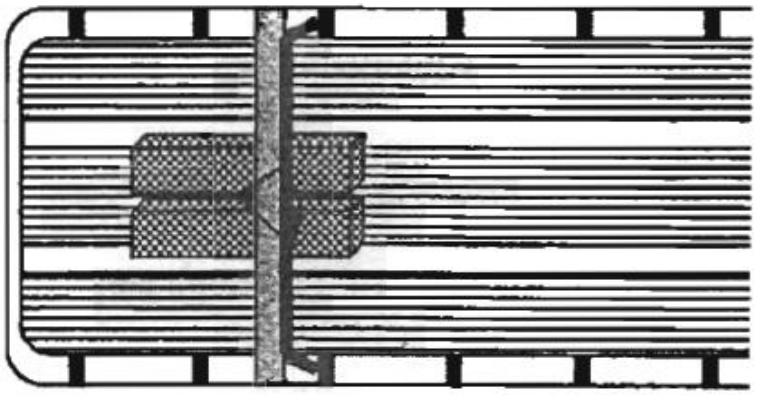
ALWAYS REPORT ANY AND ALL PROBLEMS WITH TARPS TO YOUR DRIVER MANAGER AND EQUIPMENT MANAGER

FLATBED EQUIPMENT

WHEN SECURING YOUR TARP TO THE TRAILER

1. Place the rolled up tarp in the center of the trailer.
2. Strap over the tarp and tighten down. If you choose to use chain, best to use rubber coil mat under the chain. This will protect the tarp from damage by the chain and hold it firmly.
3. Try never to leave a tarp on a trailer, put away properly. Whether yard tarp or your own. It discourages theft. – Out of sight; out of mind.

PLACING THE TARP IN THE CENTER OF THE TRAILER MAKES IT IMPOSSIBLE TO REACH FROM THE SIDE.



FLATBED EQUIPMENT

FLATBED TRAILERS

TYPES and WEIGHT

Spread is measured from the center of the hub to the center of the hub.

Trailer # / Manufacturer	Axle Spread	Length Width	Trailer Weight	Weight
S1 – S299 East	8’ 2”	48 ft. 96 in.	9,000 lbs.	34,000 lbs. axles in CA 38,000 lbs. in all other states
SK191 - SK290 East	8’ 1”	48 ft. 96 in.	9,000 lbs.	34,000 lbs. axles in CA 38,000 lbs. in all other states
SF1301 – SF1335 Mack Trailer	8’ 6”	48 ft. 102 in.	9342 lbs.	39,000 lbs. axles in CA 38,000 in all other states
S1601 – S1625 East	10’ 0”	53 ft. 102 in.	9,540 lbs.	40,000 lbs.
S1701 –S1757 Fontaine	10’ 0”	53 ft. 102 in.	9,540 lbs.	40,000 lbs.
S19002 – S19100 East	10’ 0”	48 ft. 102 in.	9,189 lbs.	40,000 lbs.
S4000 – S4400 Wabash	8’ 6”	48 ft. 102 in.	9,950 lbs.	39,000 lbs axles in CA 38,000 in all other states
S5002 – S5020 Great Dane	8’ 0”	48 ft. 102 in.	10,000 lbs.	34,000 lbs.
SD1426 – SD1845 Fontaine	10’ 0”	53 ft. 102 in.	9,500 lbs.	40,000 lbs.
S2000 Series	10’ 0”	53 ft. 102 in.	9,650 lbs.	40,000 lbs.

Trailer Weights are approximate

No load can be more than 102” wide, otherwise a permit is required

FLATBED EQUIPMENT

FEDERAL BRIDGE FORMULA

W=5OO*((LN/N-1)+12N+36)

W=GVW LN=length N=number of axles

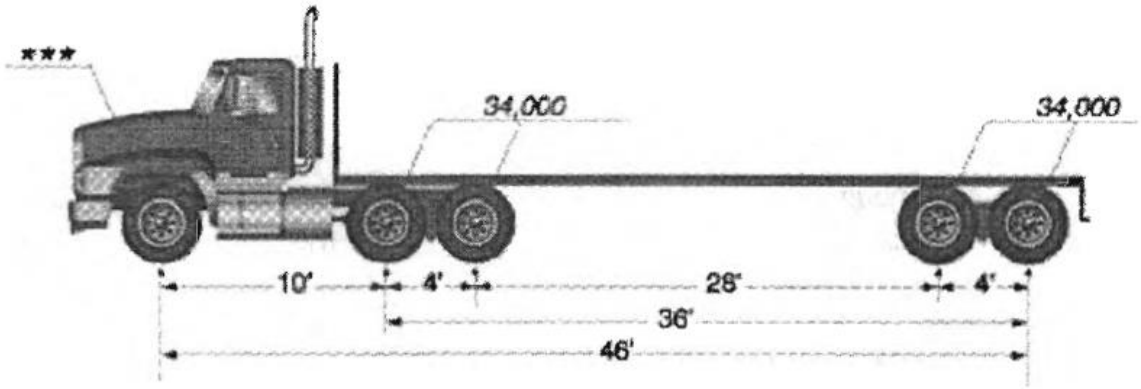
Distance	2 axles
8 ft. & less	34,000
More than 8 ft.	38,000
9 ft.	39,000
10 ft.	40,000

NOTE: 8' – 8'5" CA is 34,000
8'6" CA is 39,000

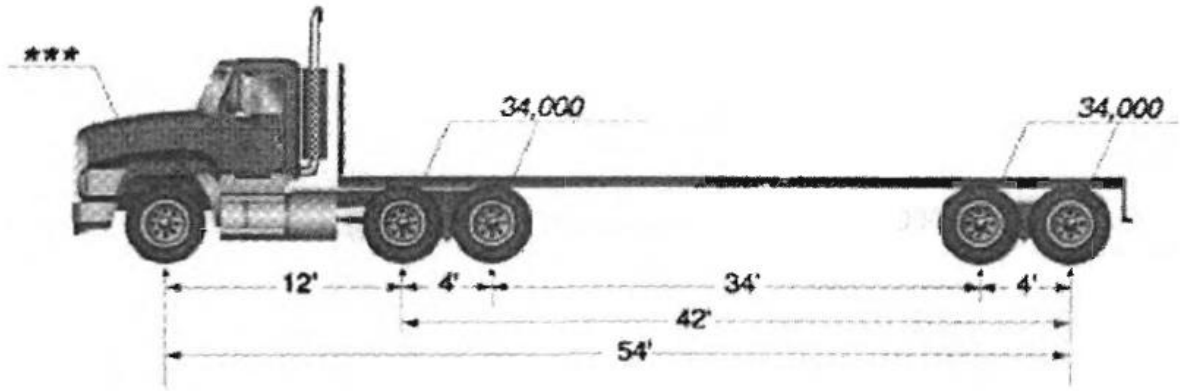
FLATBED EQUIPMENT

TRUCK DRIVER'S GUIDEBOOK

Bridge Gross Weight Formula



This 5 axle tandem has an outer bridge of 46' (distance between axles 1 and 5). Using the B/F, this tandem would be allowed a gross weight of 76,500 lbs. If this combination exceeds the gross weight of 76,500 lbs., it would be in violation. Also the inner bridge on this vehicle is 36' (distance between axles 2 and 5) using the B/F, this group of axles would be allowed a group weight of 66,000 lbs. If this group exceeds the weight of 66,000 lbs., the group would be in violation.



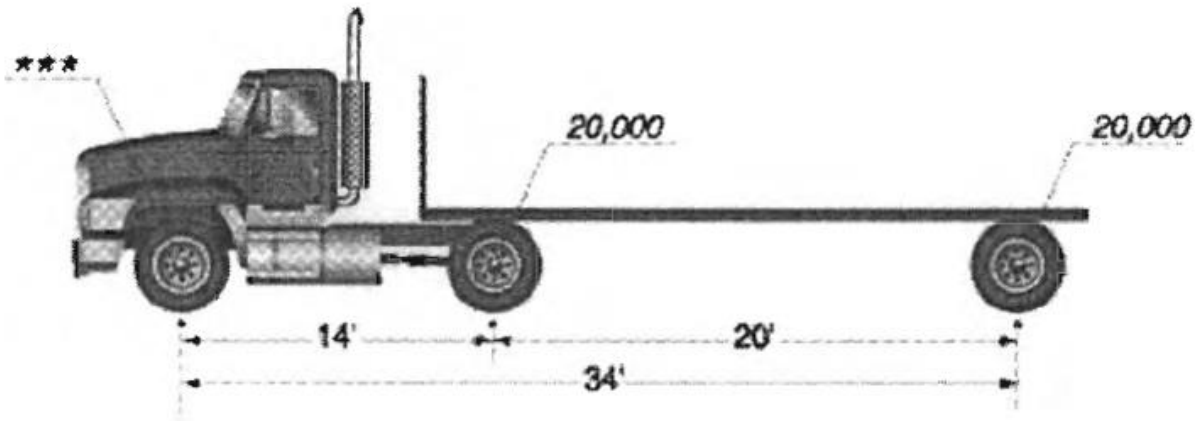
This 5 axle tandem has an outer bridge of 54' (distance between axles 1 and 5). Using the B/F, this tandem would be allowed a gross weight of 81,500 lbs. But, the B/F only allows vehicles up to a gross weight of 80,000 lbs. If this 5 axle tandem exceeds 80,000 lbs. gross weight, it would be in violation. The inner bridge on this tandem is 42' (distance between axles 2 and 5). Using the B/F, this group of axles would be allowed a group weight of 70,000 lbs. However, if the group weight exceeds 68,000 lbs., it would be in violation because each tandem is allowed 34,000 lbs.

****The bridge formula allows up to 20,000 lbs. per single axle, if the vehicle is equipped with large enough tires. Steering axle weight will vary depending on the gross weight of the vehicle.*

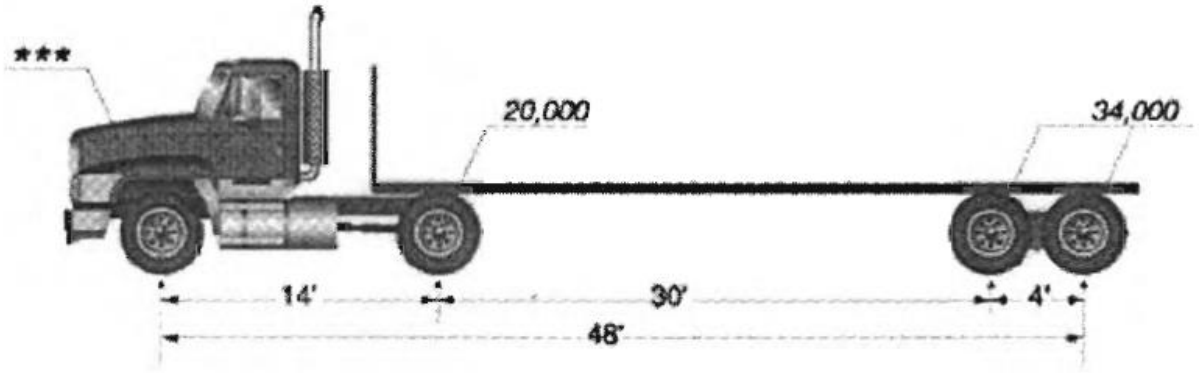
FLATBED EQUIPMENT

TRUCK DRIVER'S GUIDEBOOK

Bridge Gross Weight Formula



This combination has a bridge of 34' between axles 1 and 3. Using the B/F chart, this combination would be allowed a gross weight of 60,000 lbs. If this combination exceeds the B/F gross of 60,000 lbs., the combination would not qualify for bridge formula weights so only designated weights would apply (18,000 lbs. on a single axle).

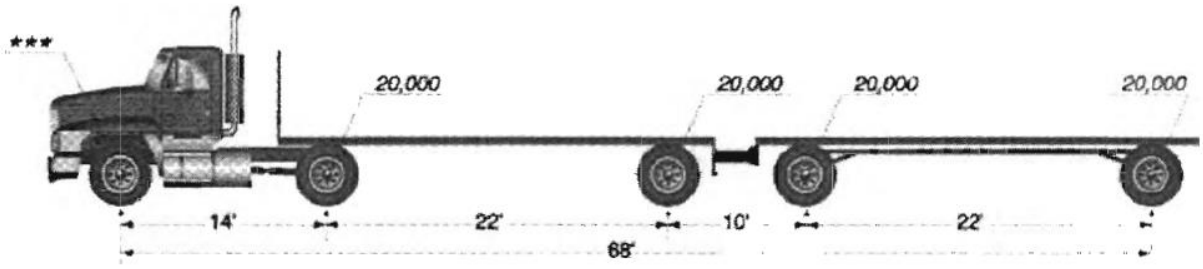


This combination has a bridge of 48' between axles 1 and 4. Using the B/F chart, this combination would be allowed a gross weight of 74,000 lbs. If the combination exceeds the B/F gross of 74,000 lbs., it would not qualify for bridge formula weights so only designated weights would apply (18,000 lbs. on a single axle/16,000 lbs. for each axle on the tandem).

FLATBED EQUIPMENT

TRUCK DRIVER'S GUIDEBOOK

Bridge Gross Weight Formula



This combination has a bridge of 68' between axles 1 and 5. Using the B/F chart, this combination would be allowed a gross weight of 80,000 lbs. because the B/F only allows vehicles up to 80,000 lbs. If this combination does not exceed 80,000 lbs., single axles will be allowed 20,000 lbs. each. It should be noted that designated loading for this combination would exceed the B/F weights with 18,000 lbs. per single axle for a possible weight of 86,000 lbs. (14,000 lbs. on the steering axle).

FLATBED EQUIPMENT

IDENTIFYING OUT OF SERVICE EQUIPMENT

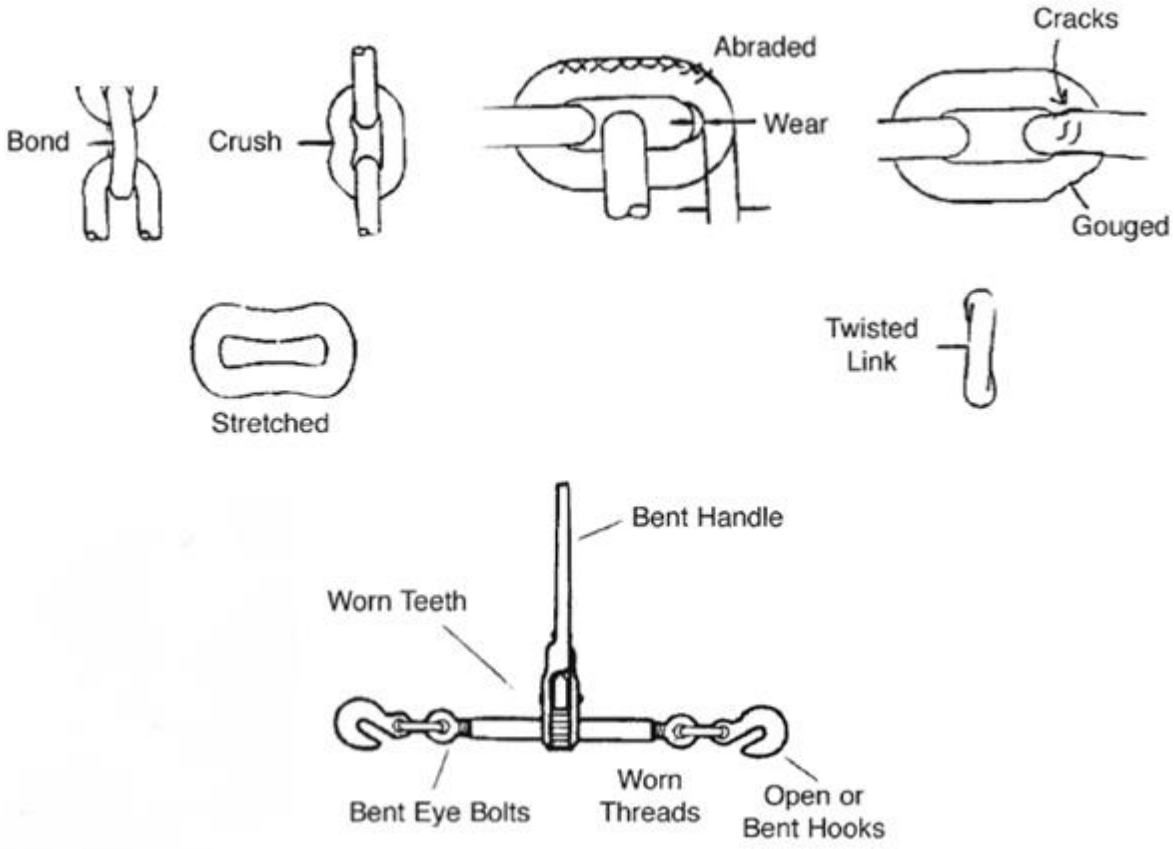


FIGURE 1
Inspect all links for gouges, chips, cuts and abrasions

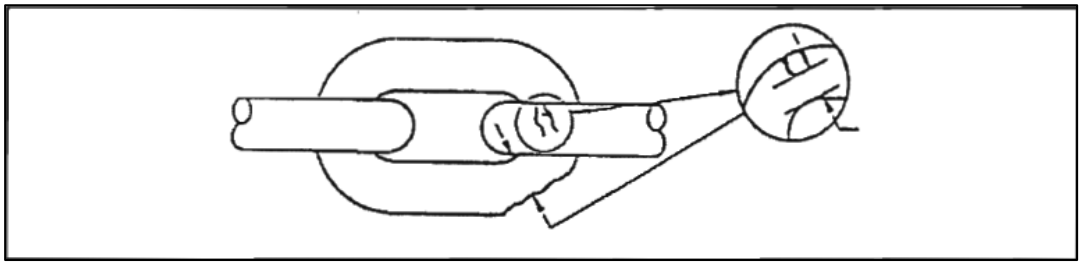


FIGURE 2
Inspected all links for wear at the bearing surfaces

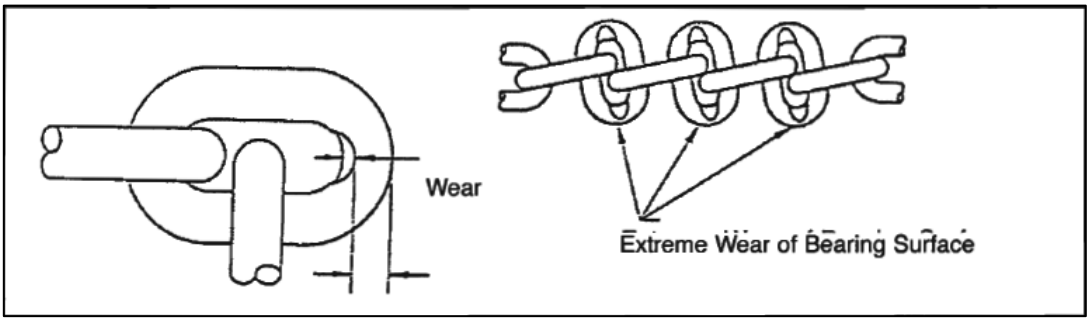


FIGURE 3
Never twist or knot a chain

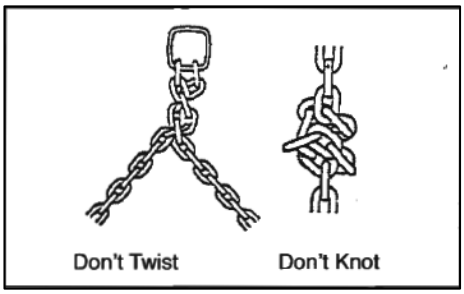


FIGURE 4
For chain stretch during inspection

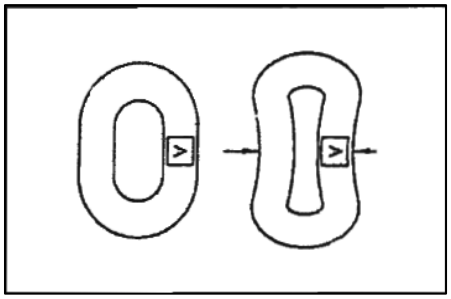
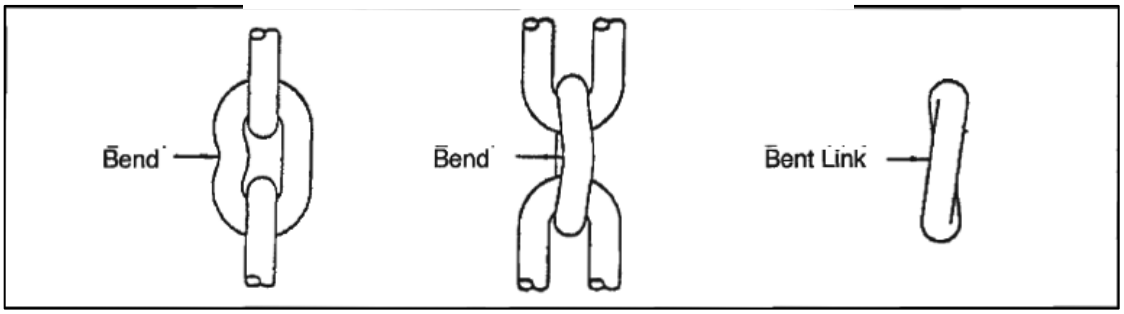


FIGURE 5
Inspect all links for bends, twists, and damage



FLATBED EQUIPMENT

FIGURE 6
Inspect all links for gouges, chips, cuts, and abrasions

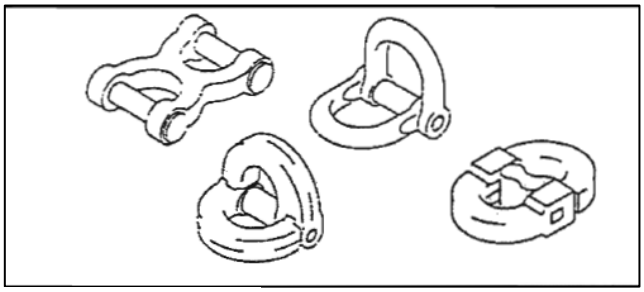


FIGURE 7
Inspect all links for wear at the bearing surfaces

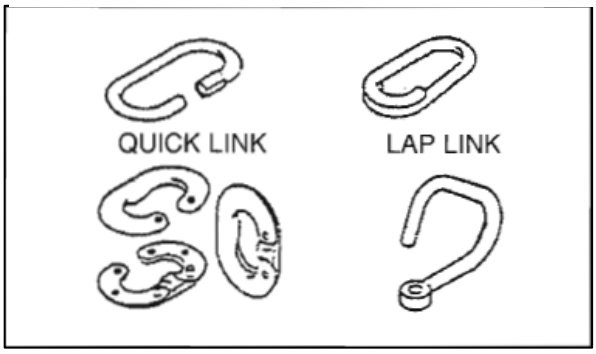


FIGURE 8

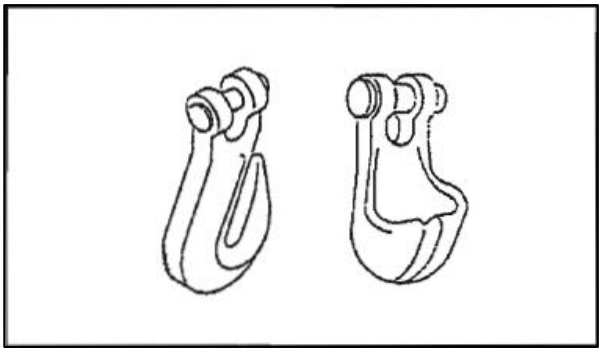


FIGURE 9
Typical rope damage (fryed)

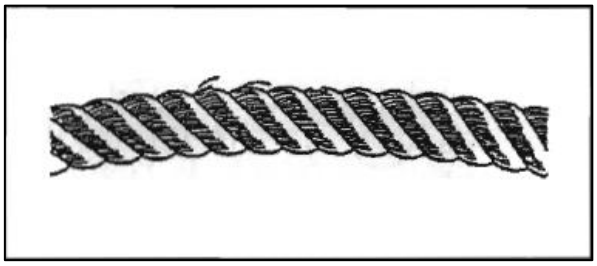


FIGURE 10
Bird Cage

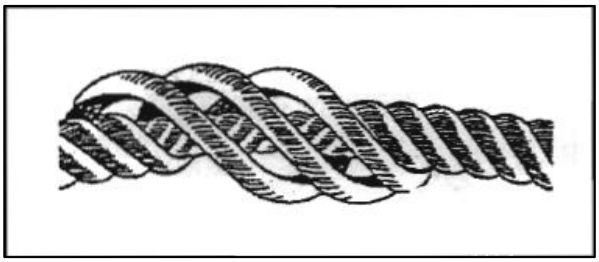
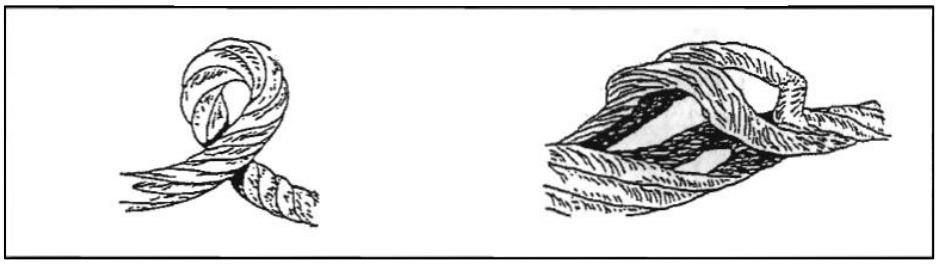


FIGURE 11
Inspect all links for bends, twists, and damage



FLATBED EQUIPMENT

SAFETY IN FLATBED

Safety should be your number one personal priority. Take the time to work safely around the load. Think about what you are doing and pay attention to what you are doing. Getting injured will cost you time and money.

FALLS

1. When working on top of the trailer, clear the deck. Leaving a winch bar or other items on the deck of the trailer can cause you to trip and/or fall from the trailer or into the load.
2. Three-point stance should be used whenever you are entering or exiting the truck. It should also be used when climbing onto the trailer. To climb onto the trailer, you should use the steps on the battery box, then the rear deck of the truck, or from the rear using the ICC bumper. Use two hands and one foot. Also, use this climbing method when climbing on top of the load, and always check your footing. **ALWAYS WEAR GLOVES, HARD HAT, AND SAFETY GLASSES.**

TARPING

3. When you are on top of a load and tarping, be aware of your location on the load. It is easy to take a step back while at the edge of the load and fall off. After the tarps are spread out on the top of a load, always check your footing before you commit to a step. Remember, you can't see what your walking on and there just might be a hole there. Avoid lifting tarps whenever possible. If you must lift a tarp, use your legs, not your back, to help lift the tarps. **ALWAYS WEAR GLOVES, HARD HAT, AND SAFETY GLASSES.**

SAFETY WINCH BAR

4. Using a safety winch bar can be dangerous if not used properly. When using the safety winch bar in the winch, make sure the bar goes through both holes in the winch to avoid the bar from slipping out of the winch. Always position yourself so that you stand to the side of the bar or pull on the bar so you stay behind the bar. This way, if the bar slips, it will go away from you, not at you. **ALWAYS WEAR GLOVES, HARD HAT,AND SAFETY GLASSES.**

RATCHET BINDER & EASY BINDER

5. If a binder twists so that you cannot get your bar on it, you can try getting leverage on it with your crowbar so that you are able to use your bar. **ALWAYS WEAR GLOVES, HARD HAT, AND SAFETY GLASSES.**

   Avoid using a binder while standing on a load. **ALWAYS WEAR GLOVES, HARD HAT, AND SAFETY GLASSES.**

FLATBED EQUIPMENT

BUNGEE CORDS

6. Bungee cords, when dry rotted, will break and can cause serious bodily injury. Safety glasses should be worn when using bungee cords. If they are cracked or dry rotted, replace them. **ALWAYS WEAR GLOVES, HARD HAT, AND SAFETY GLASSES.**

SAFETY SHOES

7. The flatbed division will issue safety shoes to all it's Drivers to help prevent slips and falls. These are mandatory footwear when working on loads or entering or exiting the truck. The cost of these safety shoes will be split between the flatbed division and the Driver.

NOTES:

_____

_____

_____

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Safety and Hazard Analysis

Employees: Before loading or unloading, ask yourself:

- Are the brakes applied, wheels chocked, and all stabilizers in place?
- Did I perform a job hazard analysis?
- Is the trailer parked on level pavement that can support the weight?
- Is the trailer overloaded?
- Does the freight appear to have shifted during transportation?
- Do the top loaded items appear to be stable?
- Do I have a clear and active line of communication with the other workers?
- Do the storage containers and pallets look stable?
- Could any of the cargo move, or become stable while removing the restraint?

Recommendations to prevent loading and unloading injuries

- Perform a job hazard analysis prior to loading and unloading procedures.
- Periodically inspect load securement during transport and correct any deficiencies
- Maintain a clear line of communication with all loading/unloading personnel
- Stand clear of the “fall shadow zone” when loading and unloading
- Establish and exclusion zone for when forklifts, cranes, and other machines are in use.
- Never turn your back to cargo while in the loading zone.

Perform a job hazard analysis prior to loading and unloading procedures

During the job hazard analysis, be sure to ask:

- What could go wrong?
- What are the consequences?
- How could injuries result?
- What is the likelihood of an injury occurring?
- What can be done to prevent injuries?
- What are possible contributing factors?

To make this analysis useful, it is important to document answers in a consistent manner.

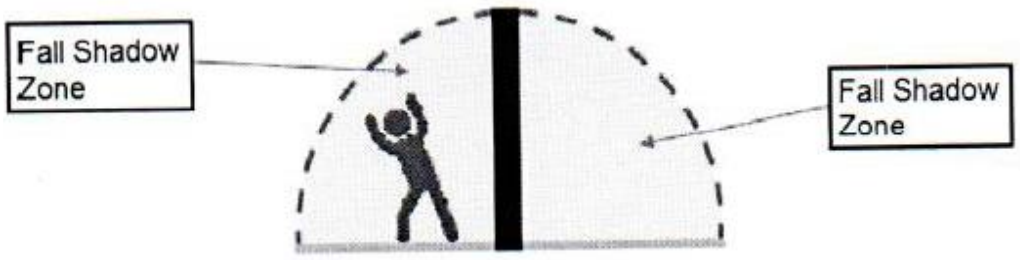
Periodically inspect load securement during transport and correct any deficiencies

FMCSA (title 49 section 392.9) requires that the load and securement devices be examined and adjusted during the first 50 miles.
Re-examine the cargo when the driver changes duty status, the vehicle has be driven for 3 hours, or the vehicle has been driven for 150 miles, whichever occurs first.

Safety and Hazard Analysis

Maintain a clear line of communication with all load personnel

Clear communication should be established early to raise awareness of hazards in the loading zone. Verbal agreement on a cargo loading and unloading strategy should be established prior to entering the loading zone.



Stand clear of the "fall shadow zone" during loading and unloading

Employees should stand clear of the area surrounding cargo in which it is reasonably foreseeable that a tip over would result in crushing or struck injuries. Workers are especially vulnerable to this zone when the cargo is being moved.

Establish an exclusion zone for when forklifts, cranes and other machines are in use

The driver and other personnel should establish and "exclusion zone" during loading and unloading processes. An exclusion zone is an area that prohibits personnel from being present during load zone machinery operation. All personnel should remain clear of these zones until the machinery has ceased all movement and is turned off.

Never turn your back to cargo while in the loading zone

All personnel should maintain awareness of the position of the cargo and never turn their back to it during loading and unloading processes. Even a small shift can compromise stability and result in crushing injuries.

Securing Flatbed Loads

When securing flatbed loads, especially multi-layer cargo, practice the following.

1-When possible, start securements at the farthest ends of cargo. This will allow securements to be applied while providing an escape route, should the cargo shift. THEN PROCEED TO ADD YOUR ADDITIONAL SECUREMENTS, TOO MEET DOT AND SWIFT REQUIREMENTS.

2-Apply even pressure on both sides of the cargo to be secured. Example-If using ten (10) securements, try to have an even amount of pressure applied to each side of the trailer, in this case five (5) and five (5) and simply snug each securement. THEN PROCEED TO PROPERLY SECURE EACH SECUREMENT. THIS WILL HELP PREVENT, THE PULLING OR SHIFTING OF THE CARGO.

3-Check the supporting structures of the load. To be sure they are capable of supporting the cargo and the pressure of the securements. Example-If using 4x4 dunnage, check for severe cracking, dry-rot or any signs that may detect structural weakness.

4-Watch for cargo that can rotate, swing or any other type of movement. All movement must be secured. REMEMBER, CARGO MUST BE PREVENTED FROM MOVING FORWARD, REARWARD, SIDE TO SIDE &UP AND DOWN.

5-ALL ISSUED PPE EQUIPMET MUST BE WORN. IF EQUIPMENT BECOMES DAMAGED, LOST OR INUSEABLE, IT IS THE DRIVERS RESPONSIBILITY TO CONTACT THEIR DRIVER LEADER OR OTHER SWIFT SAFETY PERSONNEL FOR REPLACEMENT.

DRIVER SIGNATURE_____ DRIVER CODE_____

PRINT NAME _____

LOAD TYPES

Section Overview

In this section

The table below lists the topics in this section.

LOAD TYPES (Continued)

Section Overview (Continued)

In this section The table below lists the topics in this section.

LOAD TYPES

PALLETIZED CARGO

For an example: Loads that would be palletized are load such as cement block, brick, roofing shingles, rolled roofing, 5 gallon pails, 100 lb. bags of cement or drywall mud and USG loads.

Cargo loaded on pallets must be protected from damage and prevented from movement on the trailer. The best method to protect and prevent movement is the use of V-boards. Using V-boards along the sides of the load as well as the front and back of the load, when tied down properly, will help to lock the load together, greatly reducing movement. The V-boards will also act as edge protection where the tie down touches the cargo.

To properly tie down a palletized load, you will need to use V-boards all the way around the top of the load and place tie downs over each pallet along with crossties in front and back of the load.

CEMENT BLOCK

CROSS TIE
WITH ASPHALT SHINGELS

CRATED GLASS

ASPHALT PLUGS

LOAD TYPES

DRESSED LUMBER

(Also includes Drywall)

Part 393.118

These rules apply to *bundles* of dressed lumber, packaged lumber, building products such as plywood, wallboard or other materials of similar shape.

According to Part 393.118 (securing dressed lumber) any lumber load that is bundled and layered and stands 6 ft. or more above the trailer deck, must have belly wraps over the second tier or over a middle tier of bundles if there are more than 2 tiers, with a **minimum** of two (2) tie downs if the bundles are of 5 ft. in length or longer.

This rule will also apply to bundled pipe loads.

LUMBER

LUMBER

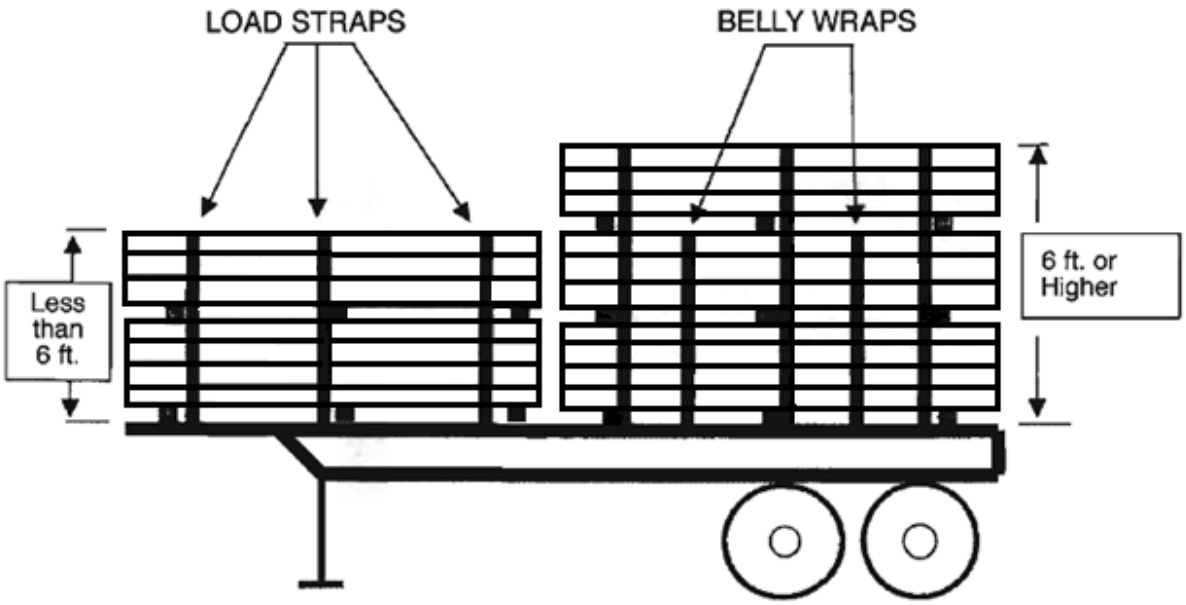
LUMBER

CENTER LOADED DRY WALL

LOAD TYPES

LUMBER

Lumber loads that are more than two lifts high must use belly wraps. If the lifts of lumber are 12 ft. lengths, no less than three straps can be used over the lift. (Part 393.110-3)



METAL PIPE LOADS

BUNDLED STEEL PIPE

To secure a bundled pipe load that is two or three lifts high and 23 ft. long**,** would require four tie downs over the top of the load. (Part 393.110)

If the bundled steel pipe were three lifts or more high, belly wraps would be required to help secure the load. (Part 393.118)

BUNDLED PIPE

BUNDLED PIPE

BUNDLED PIPE

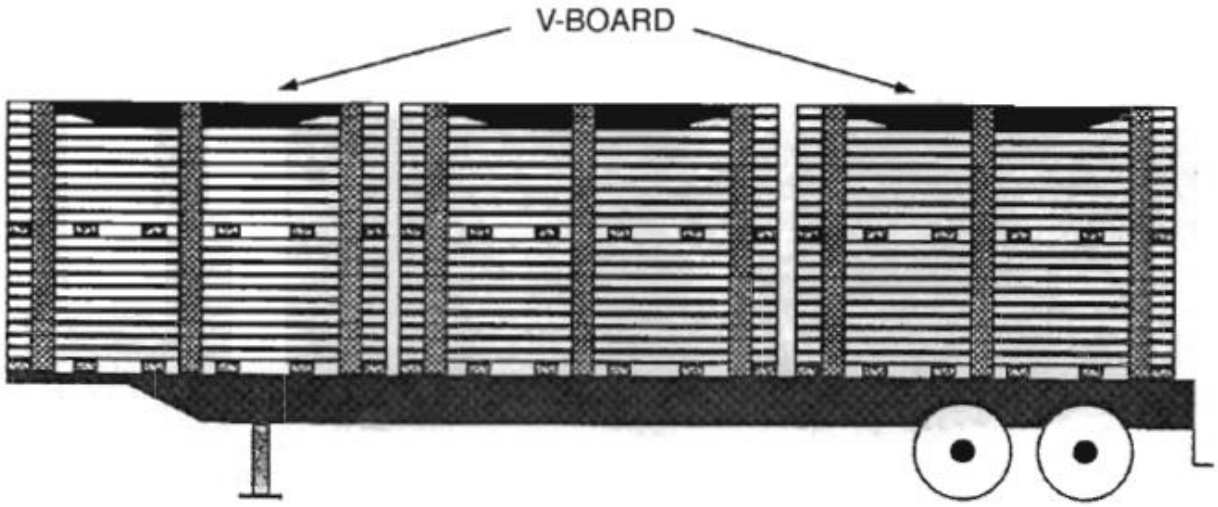
BUNDLED PIPE

LOAD TYPES

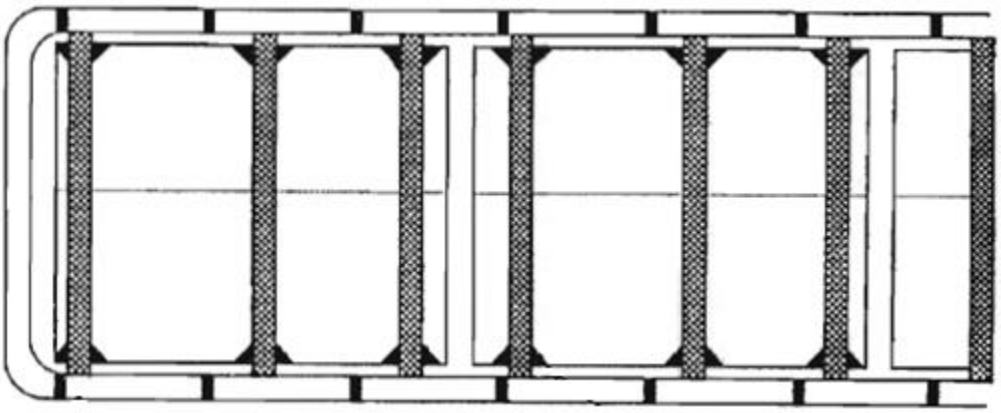
GYPSUM WALL BOARD - DRY WALL & SHEET ROCK

Use V-boards (corner irons) to secure load. Use at least 3 nylon straps per unit and protect the corners. The top sheets of the leading edge of the load are subject to wind lifting up the sheets causing them to break off. Always put a tarp on the leading edge to prevent this from happening.

NEVER MOVE THE TRAILERS WHEN THE DRY WALL HAS NOT BEEN SECURED WITH NYLON STRAPS. FULL TARP LOAD!



Don't over-tighten when securing drywall -



LOAD TYPES

GYPSUM WALL BOARD - DRY WALL & SHEET ROCK

Dry Wall

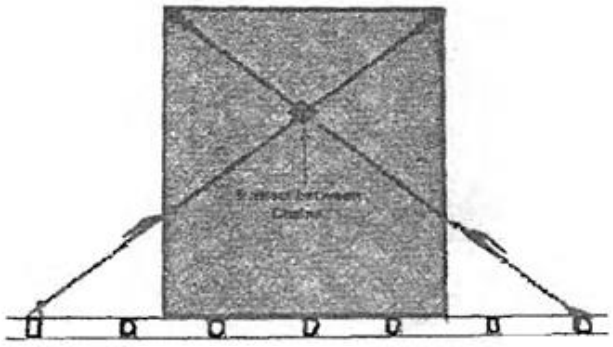
Dry Wall

Dry Wall

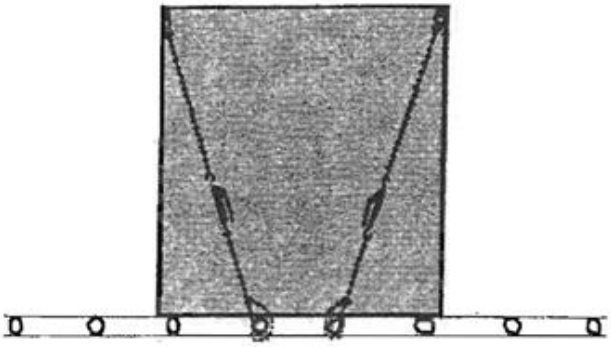
Dry Wall

LOAD TYPES

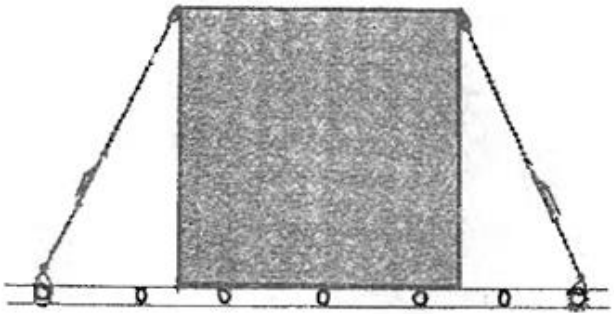
FOUR BASIC CONCEPTS OF TYING DOWN LOADS



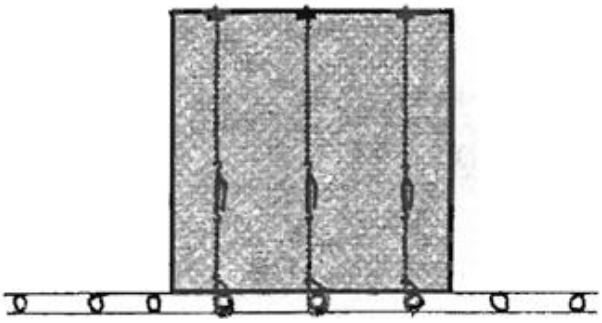
"CROSS TYING"
X-PULL



"PULLING TO EACH OTHER"
V-PULL



"PULLING AWAY FROM ARTICLE"
A-PULL



"VERTICAL TYING"
I-PULL

NOTE! THE WORKING LOAD LIMIT OF THE TIEDOWN IS CUT IN HALF. TO HAVE THE FULL LIMIT, THE TIEDOWN MUST ANCHOR ONE ONE SIDE OF THE TRAILER AND ANCHOR TO THE OPPOSITE SIDE OF THE TRAILER AS WELL. Securement going from the side of the trailer to the cargo only. The securement is one half the working load limit.

Chain 4,700lb working load limit is now 2,350lb working load limit
4" Strap 5,000 working load limit is now 2,500lb working load limit
2" Strap 3,350 working load limit is now 1,675lb working load limit

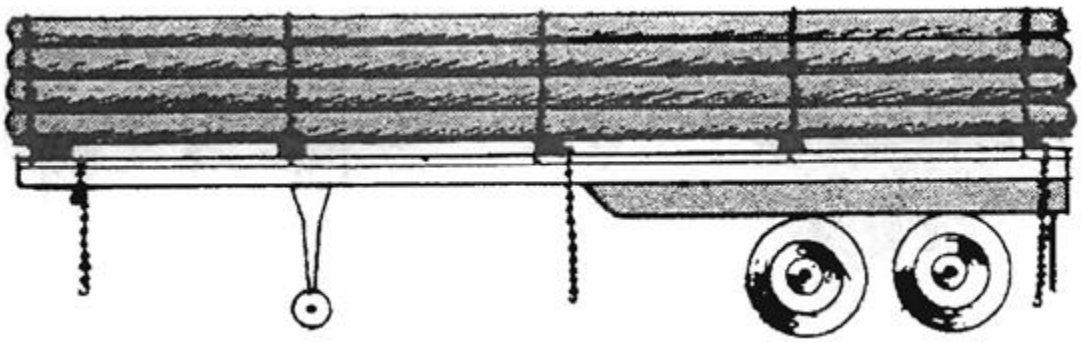
PROPER CIRCLE WRAP

Step A:

1. Place 3 or 4 inch timbers across trailer.
2. Place 3 chains across trailer behind timbers.

Step B:

1. Load pipe on trailer.
2. Place chains over load and secure load to trailer.



Step C:

1. Place circle wrap chains on pipe.

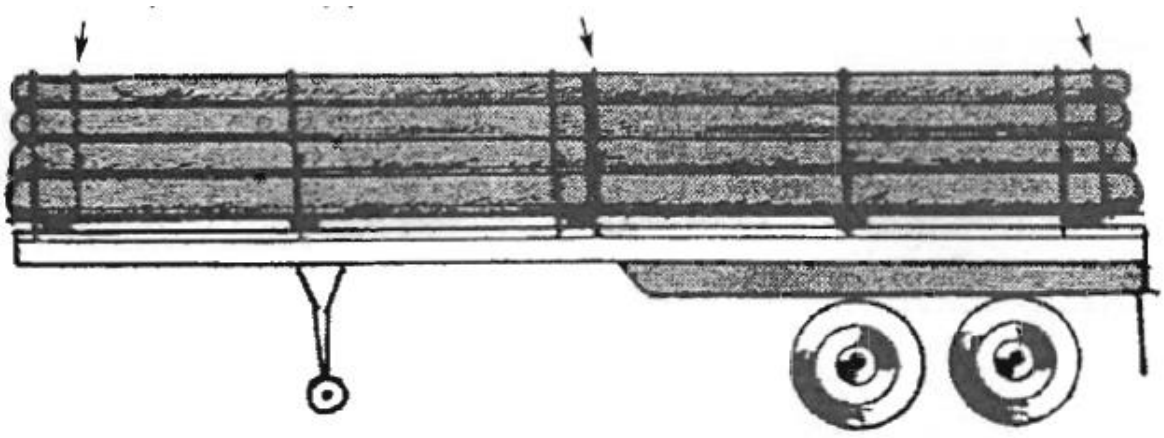


ILLUSTRATION OF FRONT VIEW OF CIRCLE WRAP CHAINS

Illustration #1: Circle Wrap Chain
NOT hooked to trailer

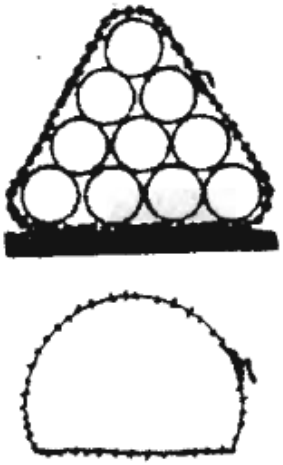
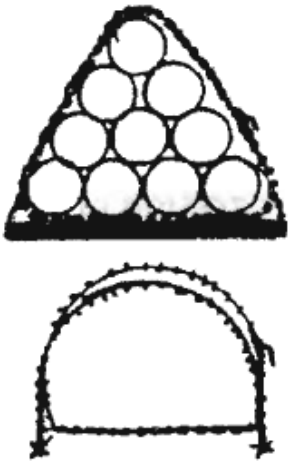
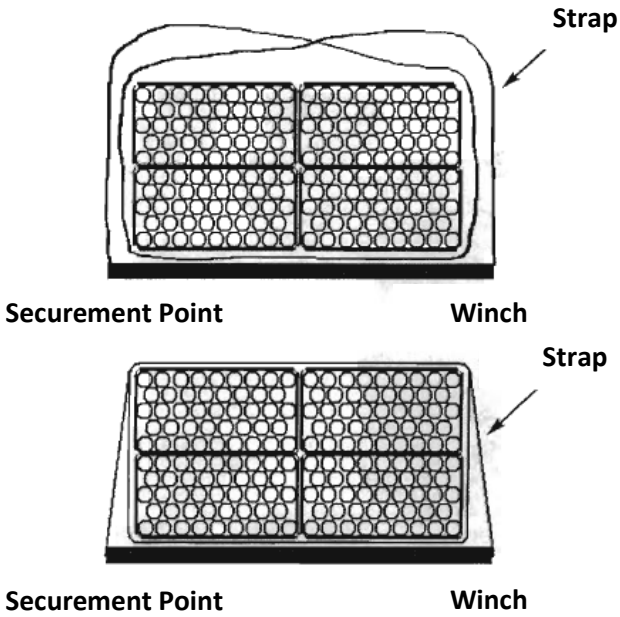


Illustration #2: Circle Wrap Chain
HOOKED to trailer



NOTE:	When you arrive to unload, remove your chains in reverse. Circle wrap chains first. Load holding chains last.
NOTE:	Release center load holding chain first, then either front of rear chain last.
NOTE:	Protection between chains and boomers is a must on plastic, fiber glass, asbestos, or wrapped and coated pipe. Nylon straps should be used on these types of loads.

ILLUSTRATION OF FRONT VIEW OF CIRCLE WRAP WITH STRAPS



PLASTIC PIPE LOADS

ABS – PVC

Plastic pipe is placed in a 2x4 housing that goes around the pipe and will make a square, or rectangular bundle. These bundles are loaded in lifts on a trailer and may be as high as 6 lifts high.

When placing straps over a plastic pipe load, the Driver must pay special attention so as not to damage the product with the tie down. In some cases, the shipper may request the Driver to throw their straps over the 2x4 housing. This is done in most cases when you have small diameter pipe with a thin wall. This would be to protect the fragile pipe from damage.

Belly wraps would be used on plastic pipe loads, and the housing are your solidly supported baring points.

BUNDLED PLASTIC PIPE

BUNDLED PLASTIC PIPE

BUNDLED PLASTIC PIPE

LOAD TYPES

ROUNDED CARGO LOADED CROSSWISE

Concrete Pipe - Bell Pipe - Paper Rolls - Rolled Fencing - Etc.

Articles of cargo that are likely to roll must be restrained by chocks, wedges, a cradle or other equivalent means to prevent rolling. The means of preventing rolling must not be capable of becoming unintentionally unfastened or loose while the vehicle is in transit. (Part 393.106c)

On these types of loads, tie downs that go over the tops of the cargo from front to back must also be used.

CONCRETE - STEEL or BELL SHAPE PIPE (loaded crosswise)

Single tier (Part 393.124)

A single tier of pipe must be immobilized from rolling forward or rearward at each end by blocking, or other equivalent means. Other pipe in the tier must also be held in place by blocking and/or wedges.

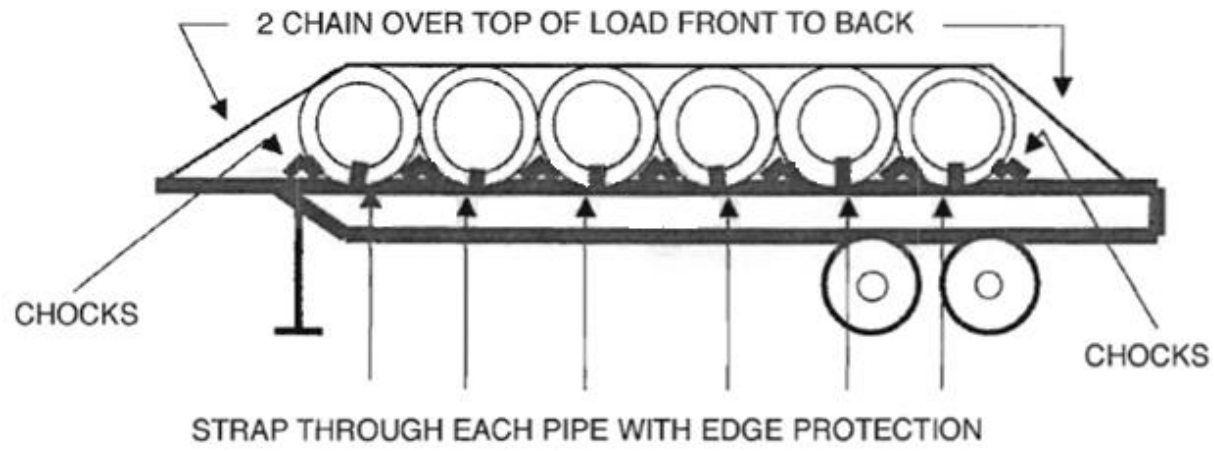
Multiple tier (Part 393.124)

Every pipe in the bottom tier must be held in contact with the next pipe by tie downs through the front and rear pipes. One tie down through the front pipe pulling to the rear, and one tie down through the rear pipe pulling towards the front. The same must be done for each additional tier of pipe. One tie down must be used through the pipe for every 10 ft. of load length, plus tie downs over the top of the load from front to back.

NOTES:

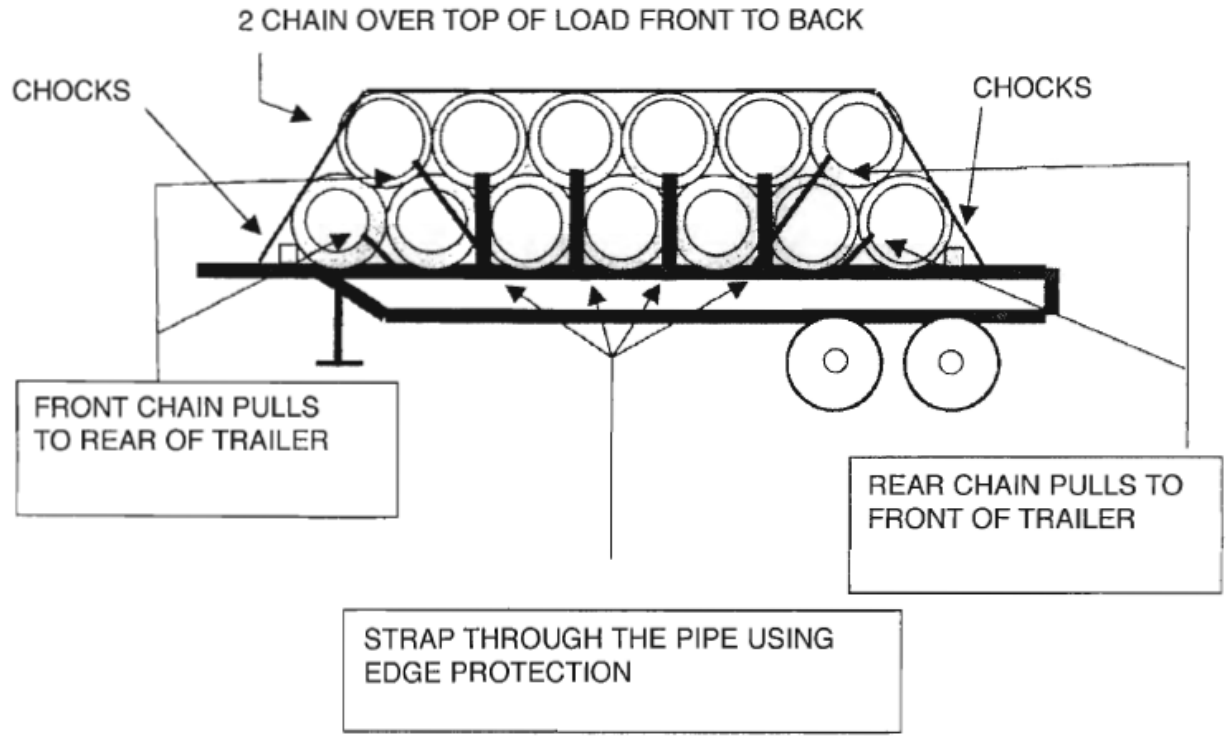
LOAD TYPES

SINGLE TIER OF PIPE



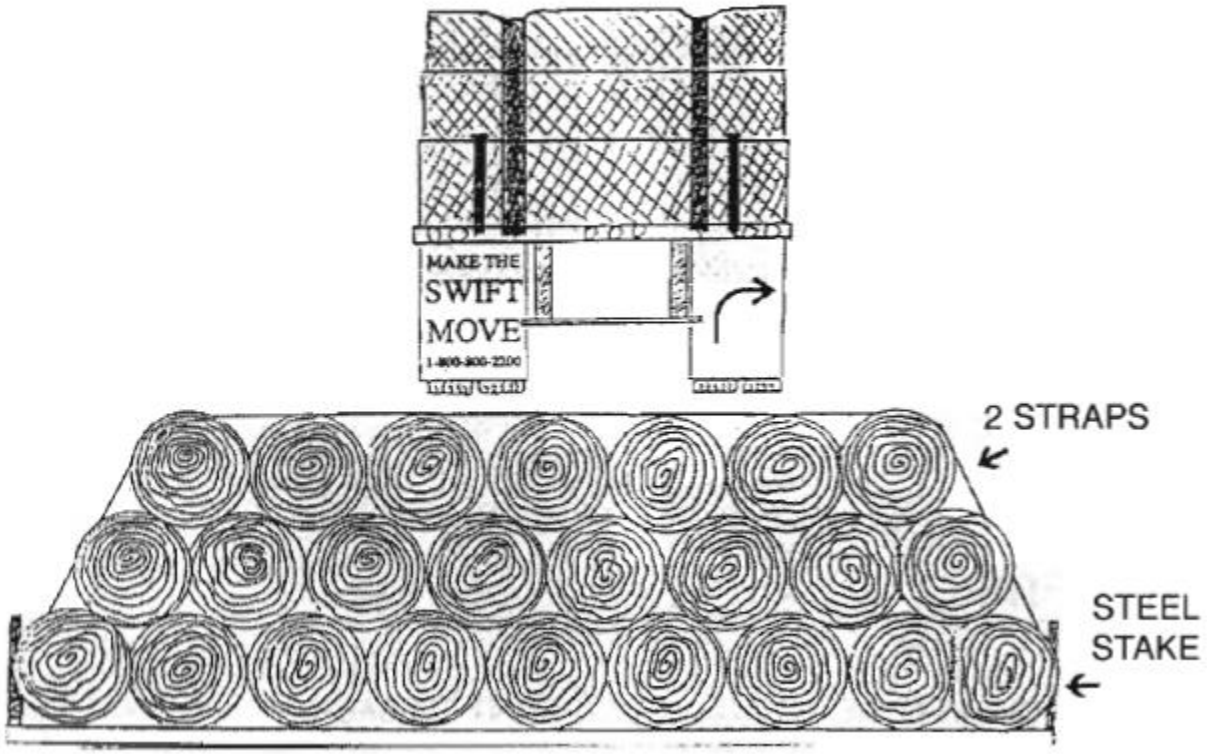
STRAP THROUGH EACH PIPE WITH EDGE PROTECTION

MULTIPLE TIERS



FENCING – ROLLS

Place stakes in the stake pockets in the front and the rear of the trailer. Use 2 straps front and rear along with required side ties.



PAPER ROLLS

Part 393.122 (I)

Paper rolls with eyes crosswise must be prevented from rolling or shifting by the use of chocking, blocking and/or bracing. The chocks or blocking must be held securely in place by some means so that they cannot become unintentionally unfastened or loose while the vehicle is in transit.

To tie down paper rolls, each roll must be chocked and the chocks must be nailed to the bed of the trailer, a tie down through the eye of each roll pulling straight down, and two tie downs over the top of the load, front to back.

Paper rolls loaded with the eyes lengthwise, must have chocks or bracing down either side of the load with two tie downs that go crosswise over the front roll, and two tie downs that go crosswise over the rear roll, with a tie down over each roll in between the front and back rolls. **PAPER ROLLS ARE ALWAYS A TARP LOAD.**

ROLLED PAPER

ROLLED PAPER

LOAD TYPES

STEEL COILS

Steel coils that weigh more than 5,000 lbs

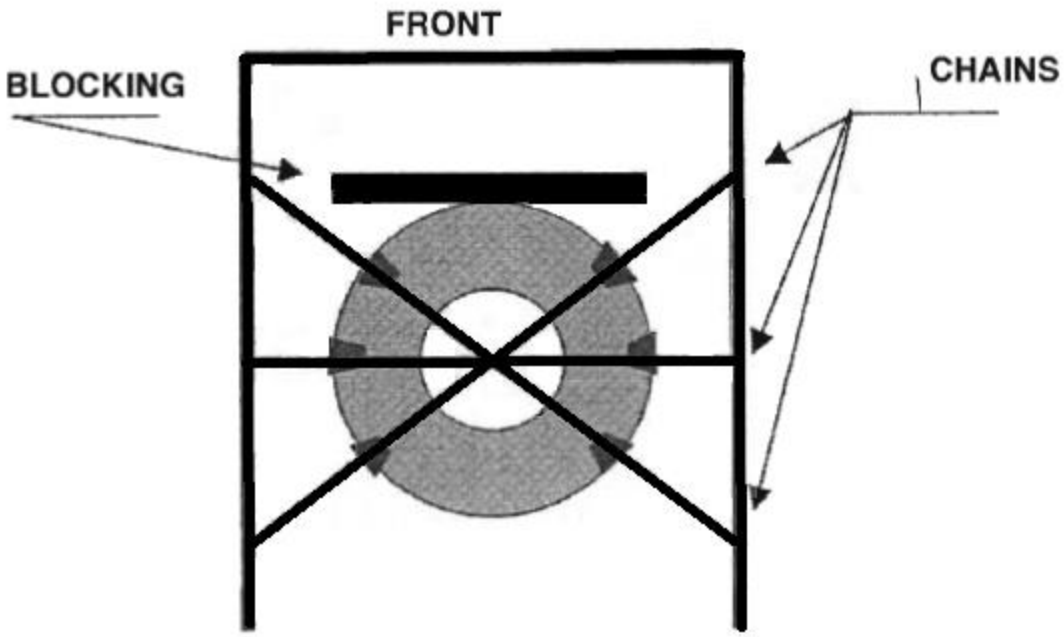
Stand up - Suicide - Shotgun styles

Stand up coils are also known as eye to the sky. A single coil loaded on a trailer must be blocked or braced to prevent forward movement.

1. Hook a chain to the left side of the trailer behind the eye of the coil. Then bring the chain over the top of the coil to the right side of the trailer in front of the eye of the coil.

2. Hook a chain to the right side of the trailer behind the eye of the coil. Then bring the chain over the top of the coil to the left side of the trailer in front of the eye of the coil.

3. Hook a chain to the left side of the trailer and bring the chain over the top of the coil to the right side of the trailer directly opposite the left side. (Part 393.120b)

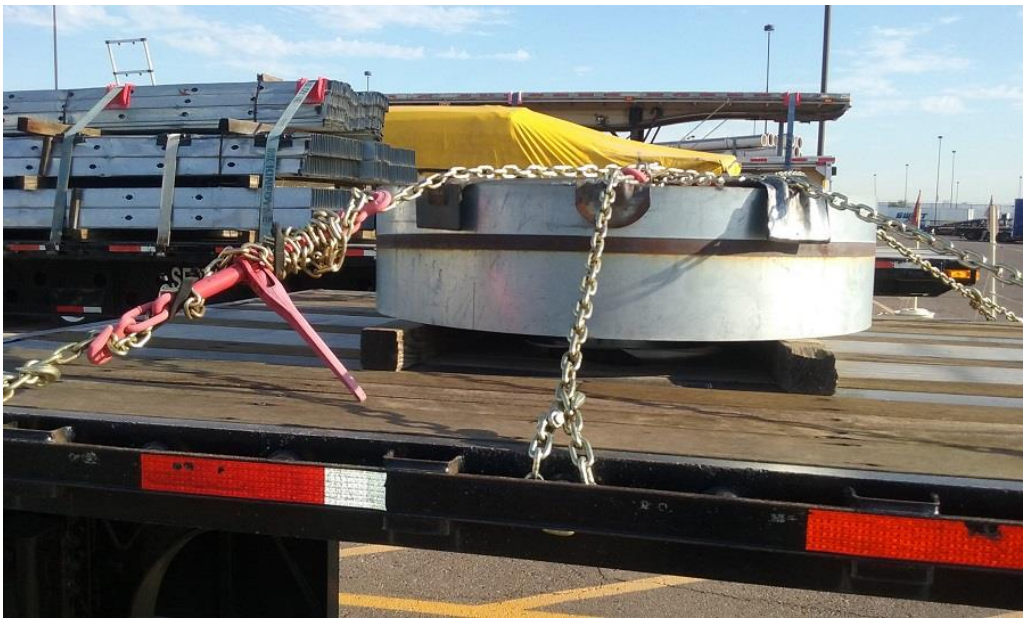


Large Stand Up Coil

"Eye to the Sky"

LOAD TYPES

LARGE STAND UP COIL – EYE TO THE SKY –



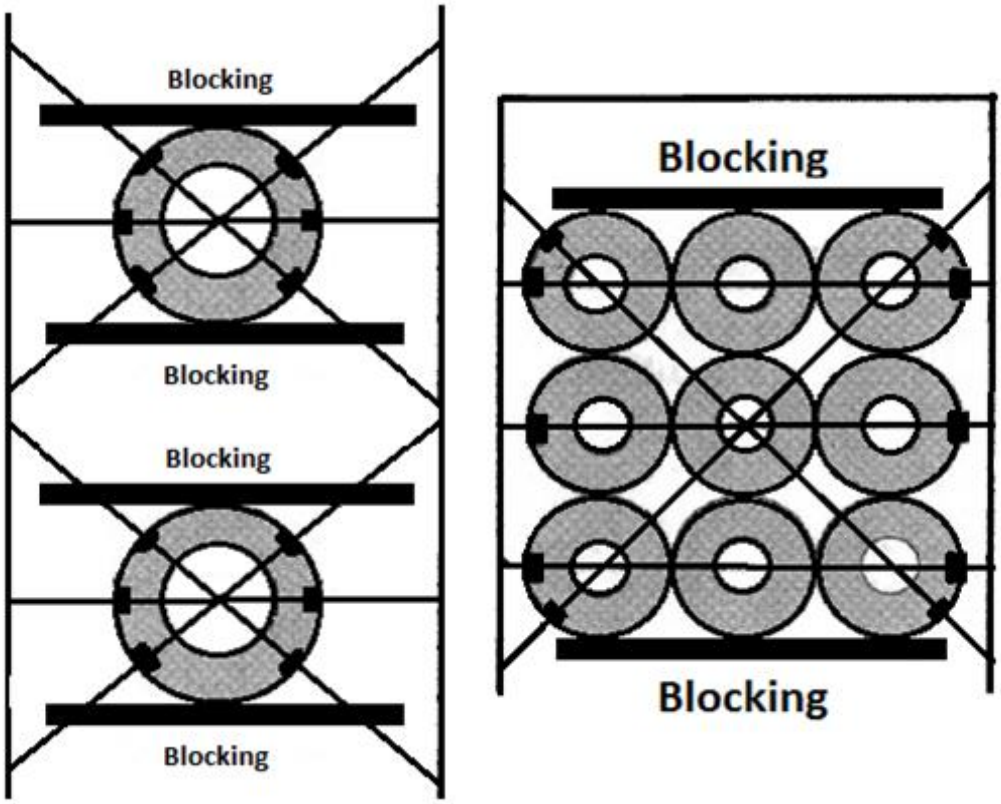
A ROW OR MULTIPLE ROWS OF STAND UP COILS

When tying down groups of stand up coils;

1. The chain that goes around the front of the load pulling to the rear of the trailer is used to help stop forward movement.

2. A chain goes around the rear of the load pulling towards the front of the trailer to help stop rearward movement.

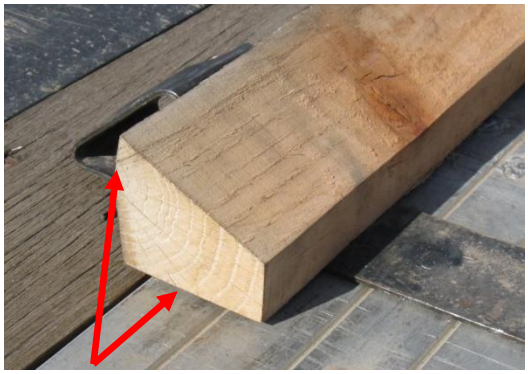
3. A chain over the top of each coil or row of coils to hold the load to the deck.



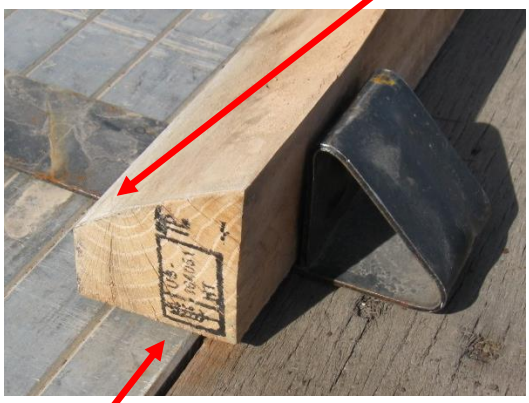
LOAD TYPES

COIL RACKS AND DUNNAGE SET-UP

INITIAL COIL RACK SETUP WITH DUNNAGE



NOTICE THE LARGER FLAT SIDE OF DUNNAGE TO THE BOTTOM AND BACK OF THE RACK. THE BEVEL AND SHORT FLAT SIDE ARE ON THE INSIDE



RIGHT WRONG

3 COIL RACK SET-UP
1 RACK FOR EACH 10,000 LBS
THIS IS FOR 20+ TO 30,000 COIL

IT'S WRONG BECAUSE, THE ANGLE WILL BE TOO STEEP TO SUPPORT THE COIL OFF THE DECK

STEEL COILS – LOADED SUICIDE

(Eye Facing to the Side of Trailer) (Part 393.120c)

Coil racks are used to keep the steel coil from rolling and must support the coil off the deck. Only horseshoe chains are used on a suicide coil, crisscross chains are illegal on this style of coil.

The chains shall be secured to the vehicle at each end and shall be anchored ahead and behind the coil as required by the direction of the anchorage in the following table:

Weight (lbs) Row or Group	Total Binders	Direction of Anchorage's	
		Ahead	Behind
25,000 lbs or ***less***	4	2	2
25,000 lbs or ***more***	6	3	3

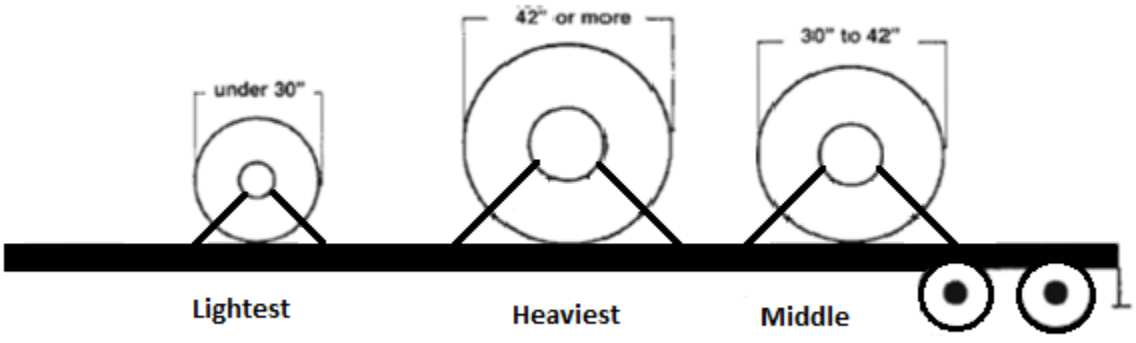
Location of anchorage for chains anchored to the side of a vehicle, the outside diameter of the coil shall determine the minimum distance between the center of the coil and the anchorage for any binder securing it to the vehicle.

Minimum Horizontal Distance – Center of Coil to Anchorage

Small Stand Up Coils (Split)

Chains can be no more than a 45 degree angle to the deck of the trailer

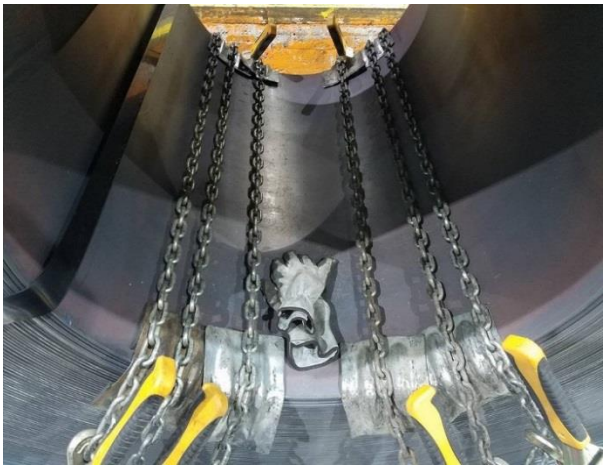
UNPALLETIZED COILS



REQUIRED BLOCKING NOT SHOWN

LOAD TYPES

STEEL COILS – SUICIDE



STEEL COIL

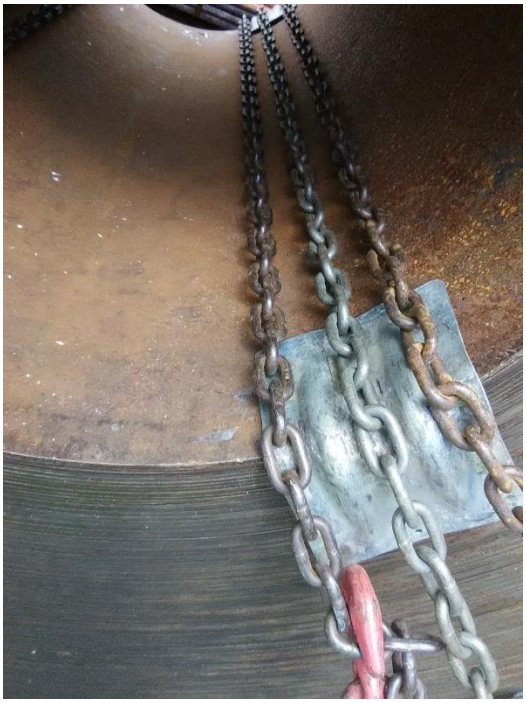
STEEL COILS

TARPED STEEL COILS

TARPED STEEL COILS

LOAD TYPES

STEEL COILS – SUICIDE



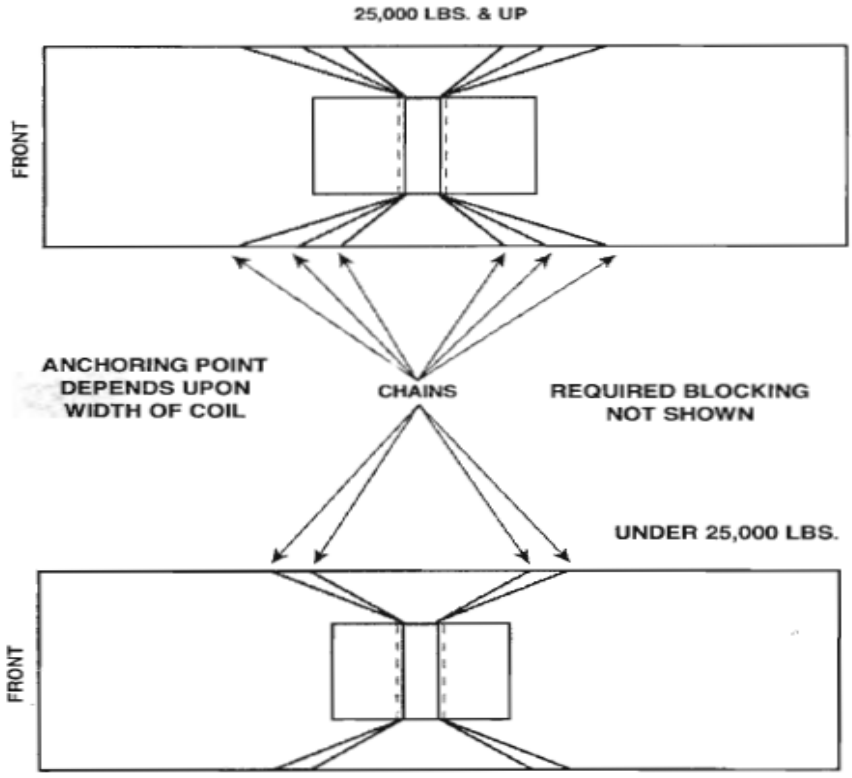
STEEL CHAIN PROTECTORS MANDATORY AT ALL POINTS OF CONTACT

LOAD TYPES

STEEL COILS – SUICIDE

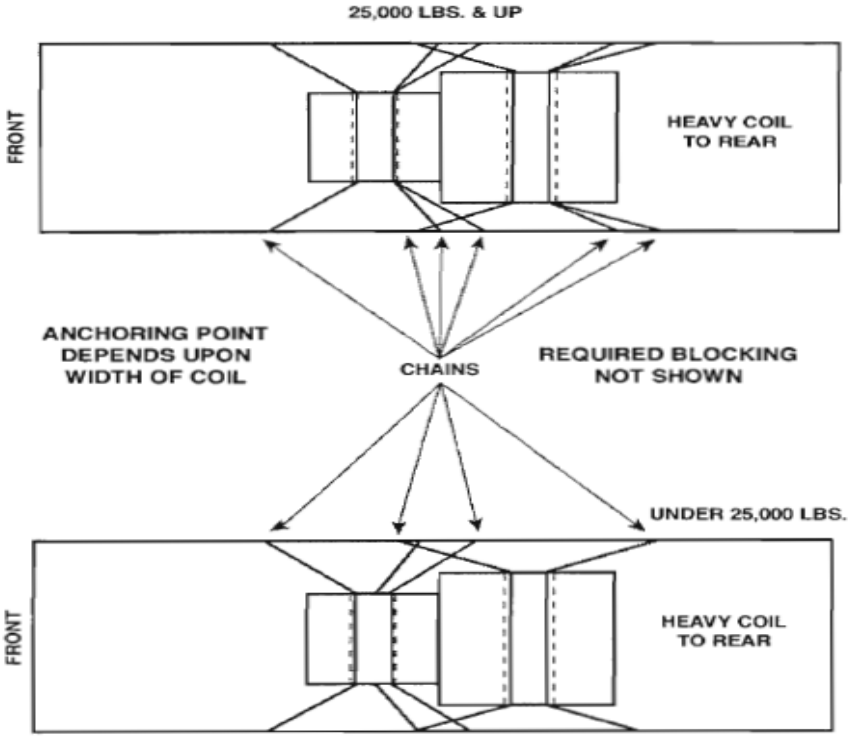
LOAD TYPES

STEEL COILS – SUICIDE



LOADED SUICIDE POSITION SINGLE COIL

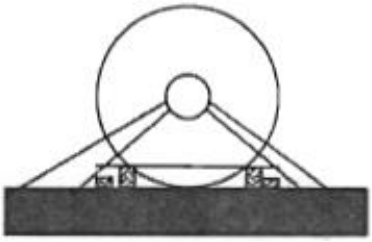
STEEL CHAIN PROTECTORS ARE MANDATORY AT ALL CONTACT POINTS



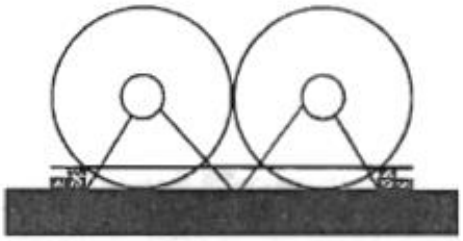
LOADED SUICIDE POSITION 2 COILS GROUPED

STEEL CHAIN PROTECTORS ARE MANDATORY AT ALL CONTACT POINTS

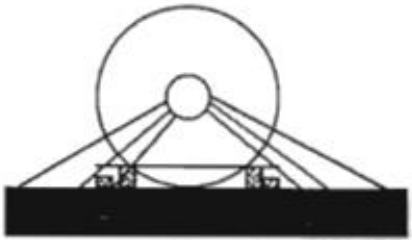
STEEL COILS – Number of Binders & Direction of Anchorage's (continued)



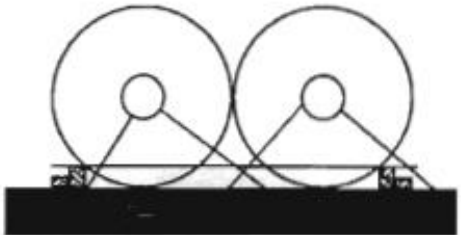
25,000 lbs and Under



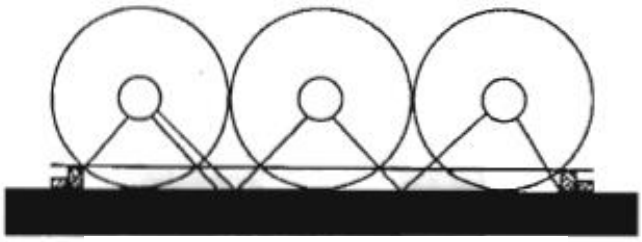
12,500 lbs and Under



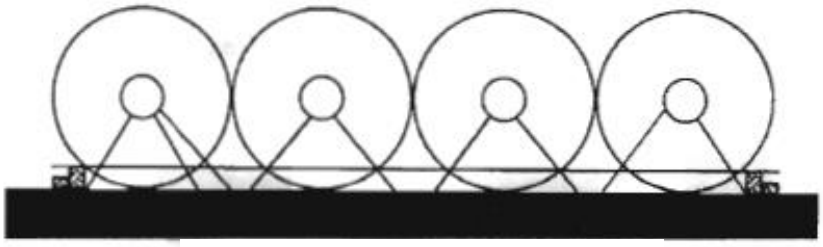
Over 25,000 lbs



12,501 lbs to 25,000 lbs

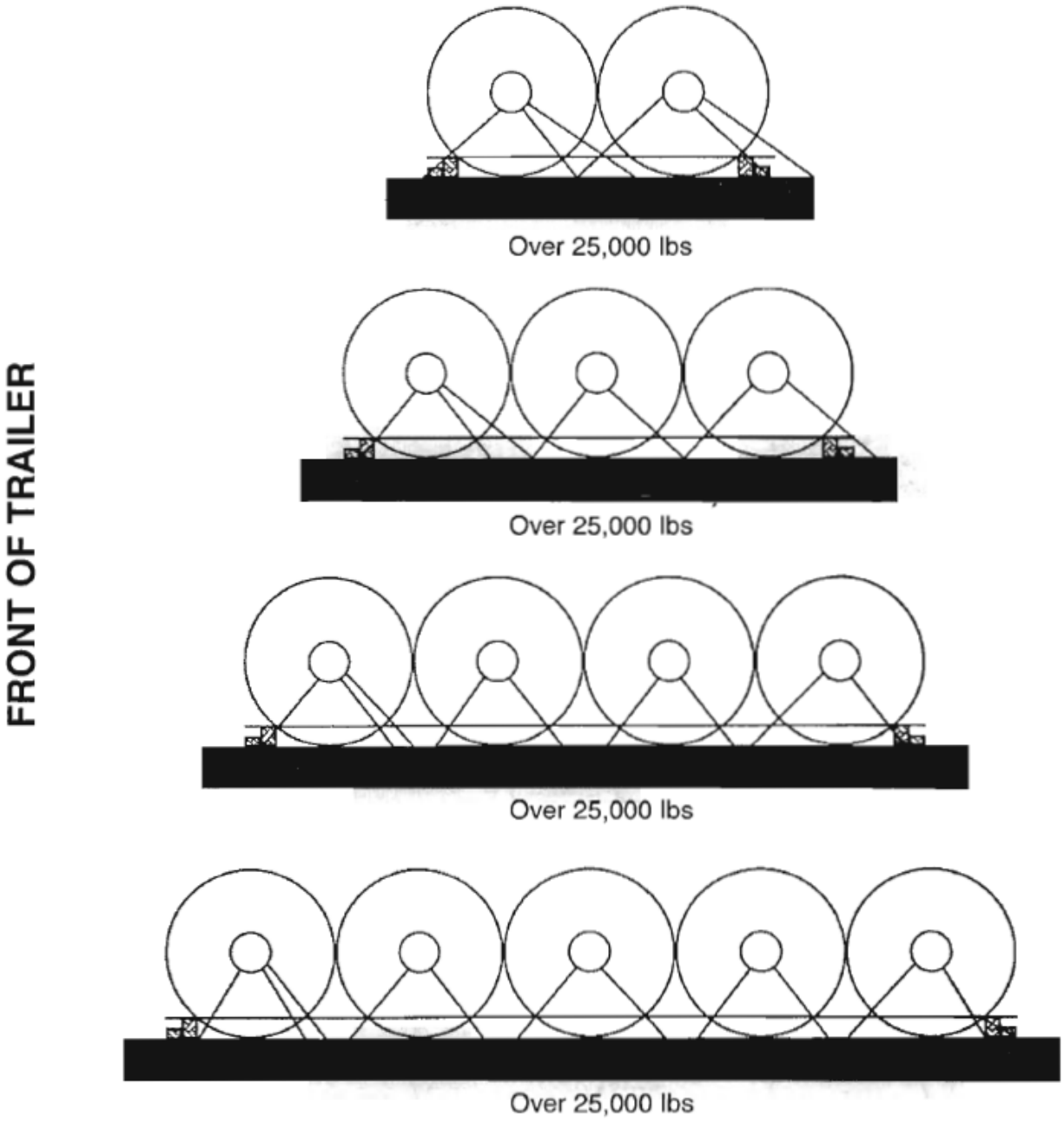


12,501 lbs to 25,000 lbs



12,501 lbs to 25,000 lbs

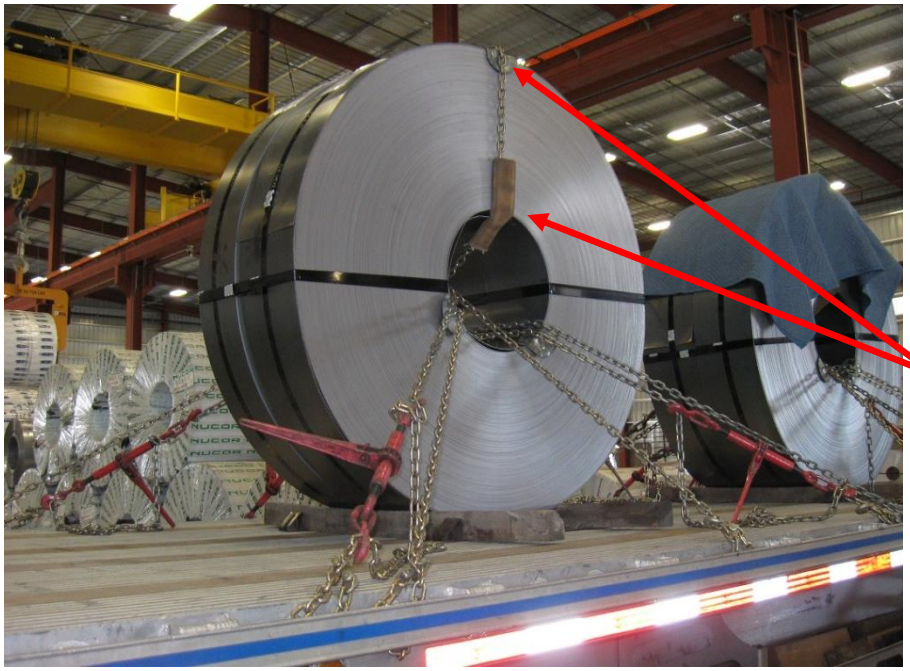
STEEL COILS – Number of Binders & Direction of Anchorage's (continued)



LOAD TYPES

STEEL COILS – SUICIDE – COIL IS TALLER THAN COIL IS WIDE –

When securing a coil that is TALLER THAN IT IS WIDER, use a circle wrap to prevent tipping or leaning NOTE- SECURE FIRST WITH CHAINS AND THEN USE CIRCLE WRAP TO PREVENT PULLING OF COIL.



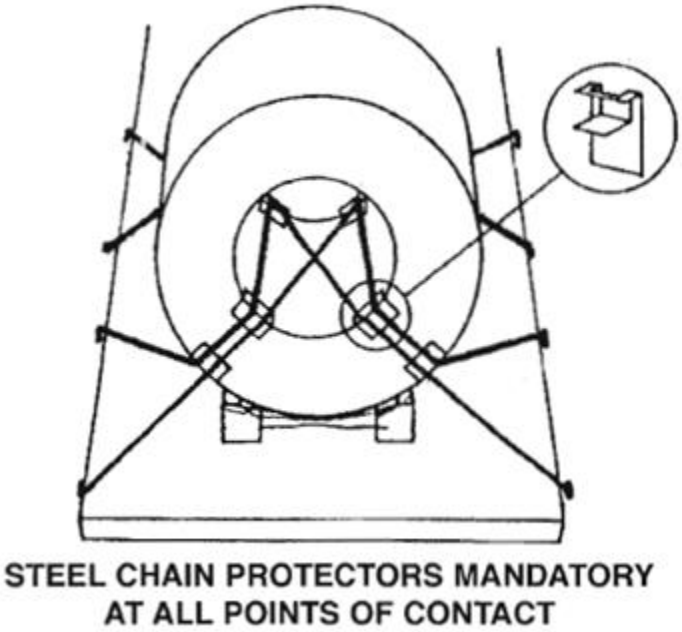
This is two sets of coils. Four coils – two sets side by side. They are at risk of falling over.

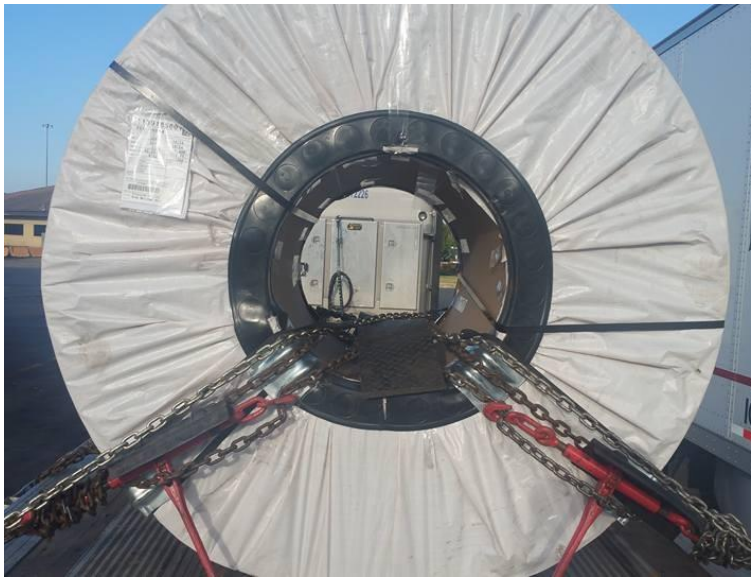
A circle wrap chain with edge protection for the top of the coil and the eye.

Note the circle wrap through the eye of the coil.

STEEL COILS – LOADED SHOTGUN POSITION

(Eye Forward and Aft on Trailer)

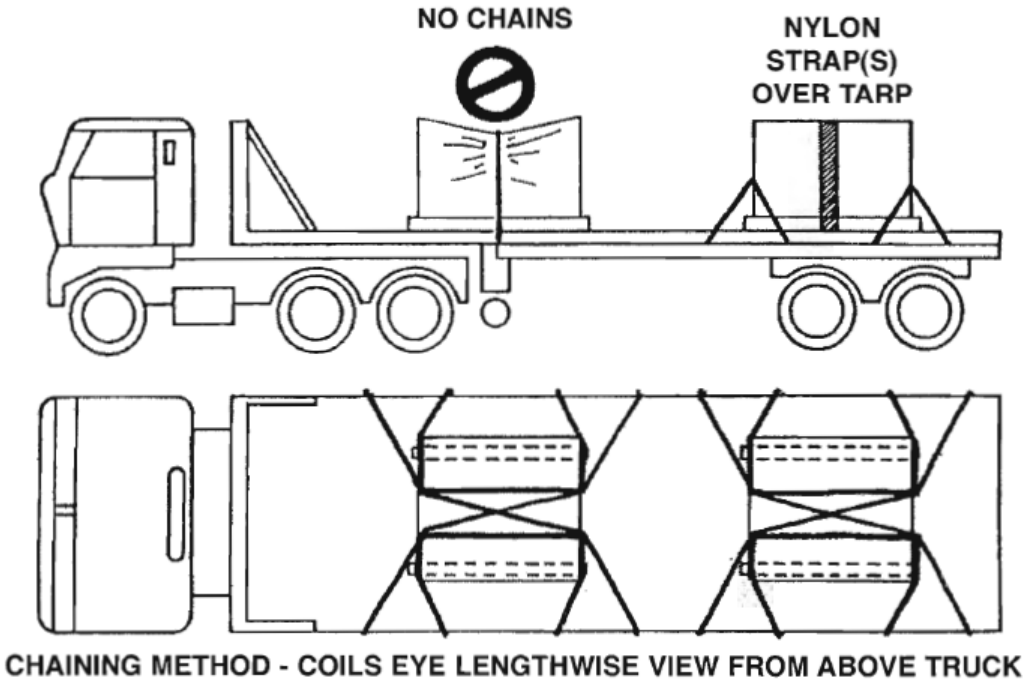




LOAD TYPES

STEEL COILS – LOADED SHOTGUN POSITION

FULL TARP LOAD



CHAINING METHOD - COILS EYE LENGTHWISE VIEW FROM ABOVE TRUCK

Be sure to secure tarp to deck so water will not get in.

STEEL COILS – LOADED SHOTGUN POSITION

NOTE

THE FOLLOWING TABLE SHOWS ACTUAL NUMBER OF CHAINS REQUIRED. DRIVER MUST SECURE LOADS IN ACCORDANCE WITH THE FOLLOWING TABLE:

Table of Minimum Number of Chains & Straps Required

Weight of Coil (Pounds)	For Grade 70 High Test 5/16" Minimum and higher	Placement	Straps
5,000			
10,000	2	Crisscross	1
15,000	2	Crisscross	1
20,000	4	2 Crisscrosses, 2 Horseshoe	1
25,000	6	4 Crisscrosses, 2 Horseshoe	2
30,000	6	4 Crisscrosses, 2 Horseshoe	2
35,000	6	4 Crisscrosses, 2 Horseshoe	2
40,000	6	4 Crisscrosses, 2 Horseshoe	2
45,000	6	4 Crisscrosses, 2 Horseshoe	2
50,000	6	4 Crisscrosses, 2 Horseshoe	2

This chart is only for coils loaded shotgun style.

LOAD TYPES

SPOOLS OF CABLE

To tie down spools you will need **dunnage, chains, nails** and a **hammer**. In your load assignment it will tell you how many rows of spools you are to pick up, times the number of spools by two and that will be the number of dunnage you will need to bring with you to help tie down the load.

As they load, place a piece of dunnage in front of the row of spools and a piece of dunnage in back of the row of spools. The shipper supplies the chocks needed to nail to the deck in front and back of the dunnage . Next, feed two chains through the eye of the spools and have one chain pull to the front of the spool and one chain pull to the back of the spool. Repeat for each row.

SPOOLS OF CABLE

SPOOLS OF CABLE

LOAD TYPES

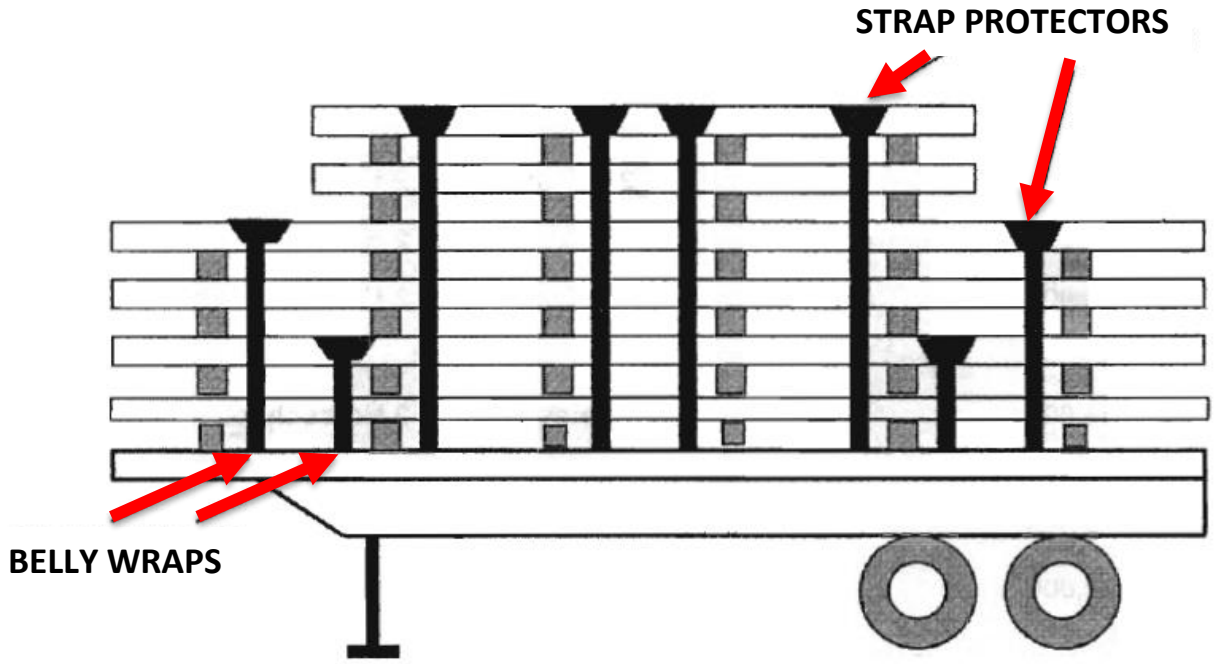
VERCO SHEETS (Steel Decking)

This diagram is meant as a reference only. Each load is different.

All loads need to be **belly wrapped**. If straps are used, edge protection for the straps must be used. The edges of this material are very sharp. Be careful when working around this product.

BASIC RULE OF THUMB FOR TIE DOWN

1. Use eqge protection or chain corners.
2. Belly wrap every other layer.
3. All tie down goes next to the dunnage.
4. **X-tie the front AND rear of ALL loads with chain**.



READ THE BILL OF LADING CAREFULLY!

Make sure you verify the trailer number and that the trailer has the correct number of bundles on it.

When you discover you are going to be late, PLEASE CALL the customer as soon as possible. Their phone number is provided on the bill of lading. You must also call the office so that VERCO can be notified.

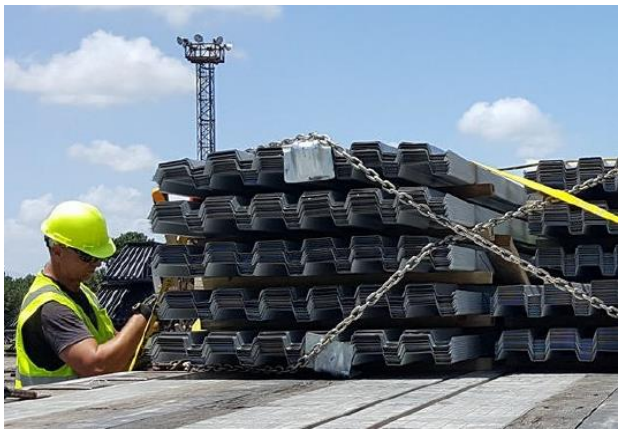
LOAD TYPES

VERCO SHEETS (Steel Decking)

STEEL DECKING

STEEL DECKING

STEEL DECKING



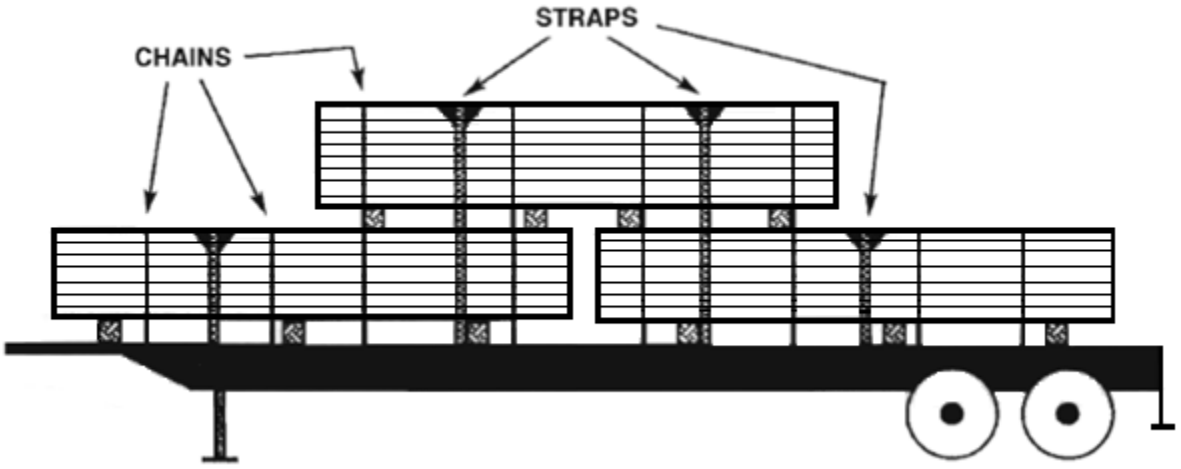
STEEL DECKING

LOAD TYPES

STEEL BAR STOCK; T-RAIL; & ANGLE

4 x 4 single piece construction dunnage. Gut tie with nylon strap. Chain down every 5' and check for loose chain after 10 miles of driving. Always verify need to tarp the load with your DM before you move.

FULL TARP LOAD!



1. 10 - 12 Pieces Dunnage-
2. Tie Down Equipment: **a. 3 chains** **b. 6 straps** **c. 1 red flag** **d. 2 binders** **e. 1 light bar**

LOAD TYPES

REBAR

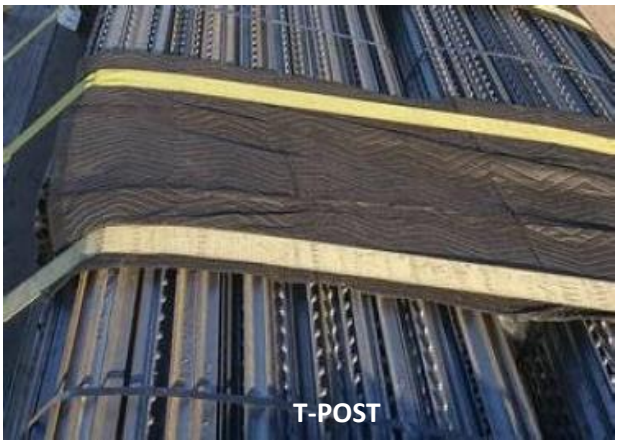
When tying down rebar be sure to circle wrap the chain where possible. This is especially true with front or rear over-hang. Be sure to review the over-hang rules for each state you will travel in**. Use chain only.**

REBAR

REBAR

REBAR

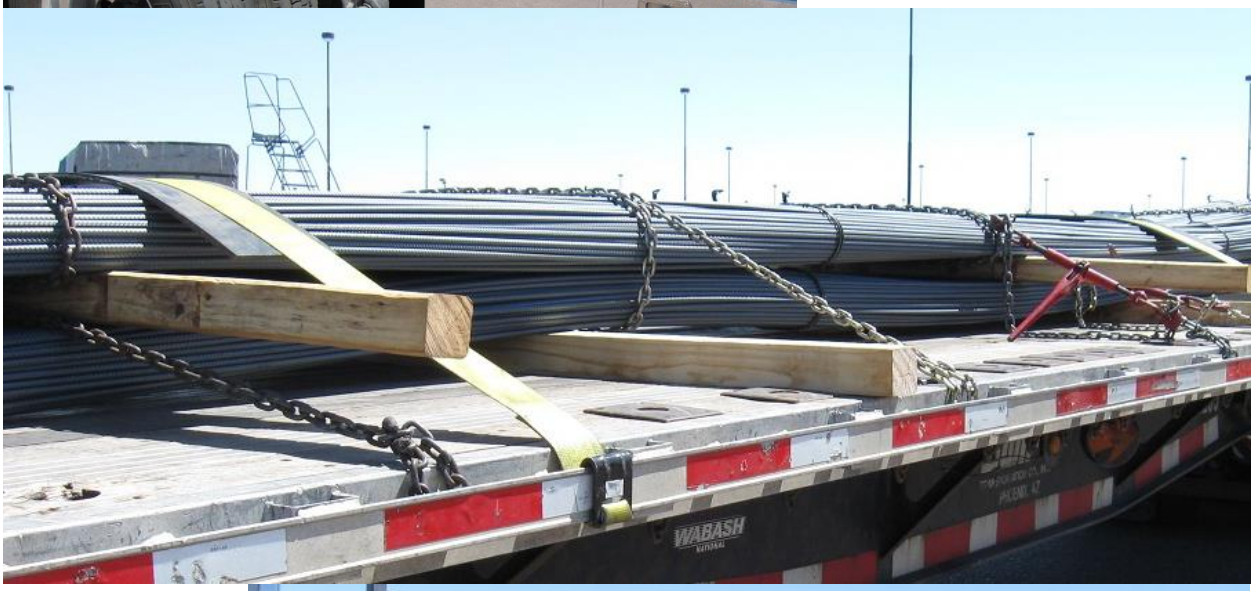
REBAR



T-POST

REBAR (continued)

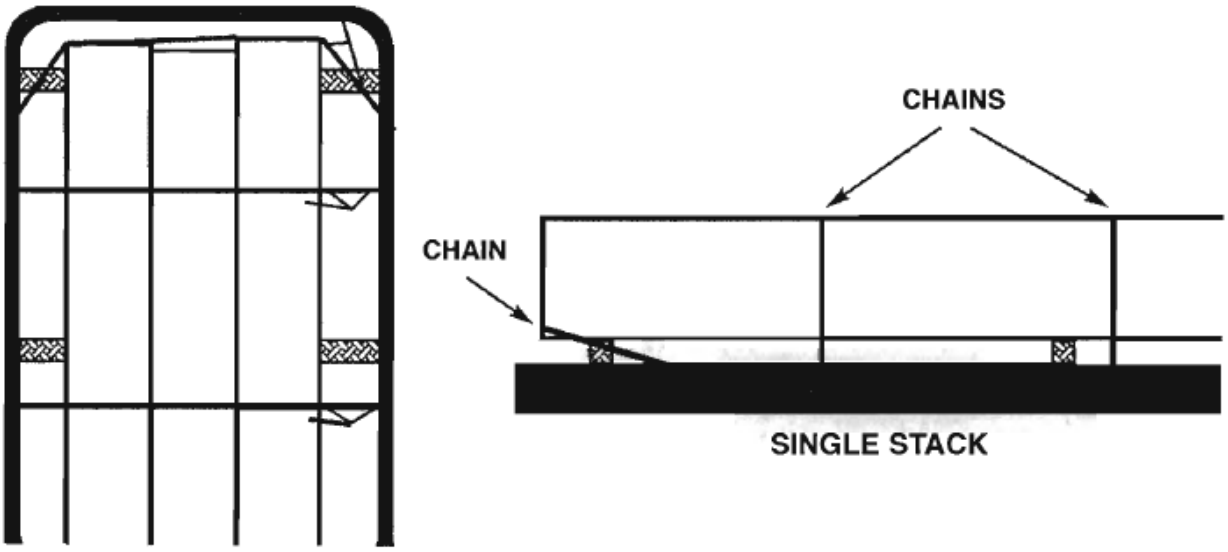
Chain is the only method used for rebar.

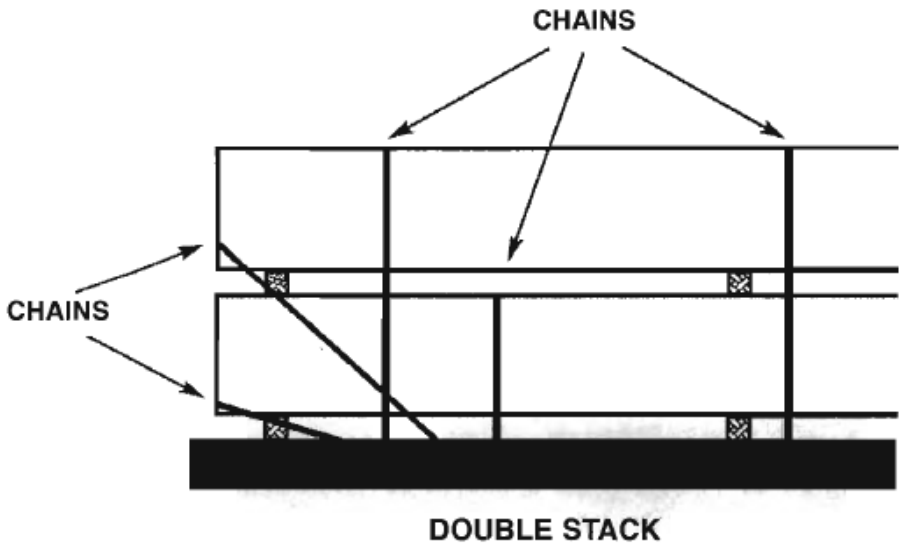


LOAD TYPES

I-BEAMS

4 x 4 single piece construction dunnage. Use cross (x) chaining to prevent forward and rearward movement. Watch for forward movement during a sudden stop. Dunnage and chain each layer. Circle wrap load when possible to ensure load stays secured together. When these are multiple layers, make sure to circle wrap each layer. When possible, always align dunnage so that it is directly over the piece of dunnage on the layer below.





LOAD TYPES

I-BEAMS

I-BEAMS

I-BEAMS

I-BEAMS

I-BEAMS

I-BEAMS

I-BEAMS

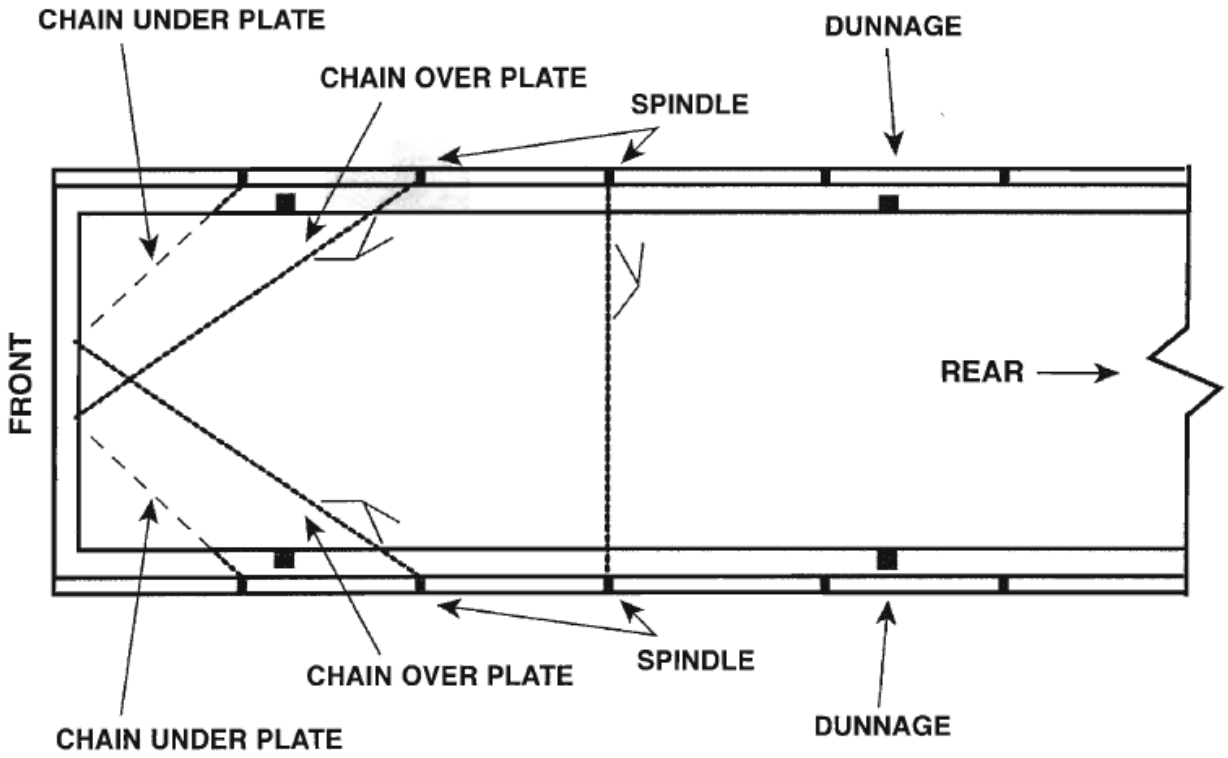
LOAD TYPES

STEEL PLATE

4 x 4 single piece construction dunnage is required. **Use chains to secure load to the trailer.** Use the Cross Over Nose method to secure the plates from sliding forward AND rearward.

CALL YOUR DRIVER MANAGER IF YOU HAVE ANY QUESTIONS.

FULL TARP LOAD VERIFY WITH DRIVER MANAGER



LOAD TYPES

ALUMINUM SOWS

To secure aluminum sows to the trailer, it is best to use chain and chain corners. These sows can slide easily on an aluminum deck. Cross tie the front and back with chain, then a chain over each stack with three chains over the back stack. Sometimes these may be tarped to keep them clean. You may also receive samples of the aluminum to give to the consignee so they can test the material. If these are lost, it may hold up the unloading.

ALUMINUM SOWS

ALUMINUM SOWS

ALUMINUM SOWS

ALUMINUM SOWS

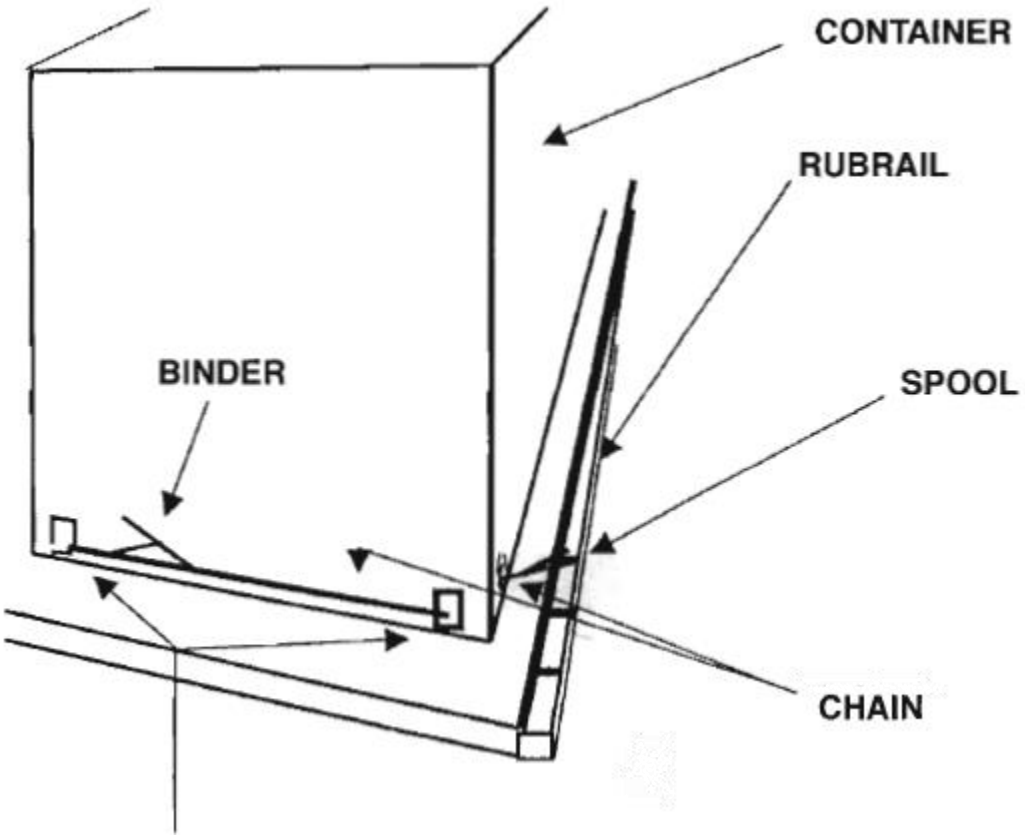
LOAD TYPES

CONTAINERS

Two normal sizes are **20 ft.** & **40 ft.**

EMPTY WEIGHT: 20 ft. - 5,000 lbs.
40 ft. - 10,000 lbs.

To secure a container to a flatbed trailer, two types of tie down are used: Straps and Chains. On a 20 ft. container use no less than three straps over the top of the container with a chain on the front and back. On a 40 ft. container use no less than four straps over the top of the container with a chain on the front and back. On containers larger than 40 ft. add additional straps over the top.

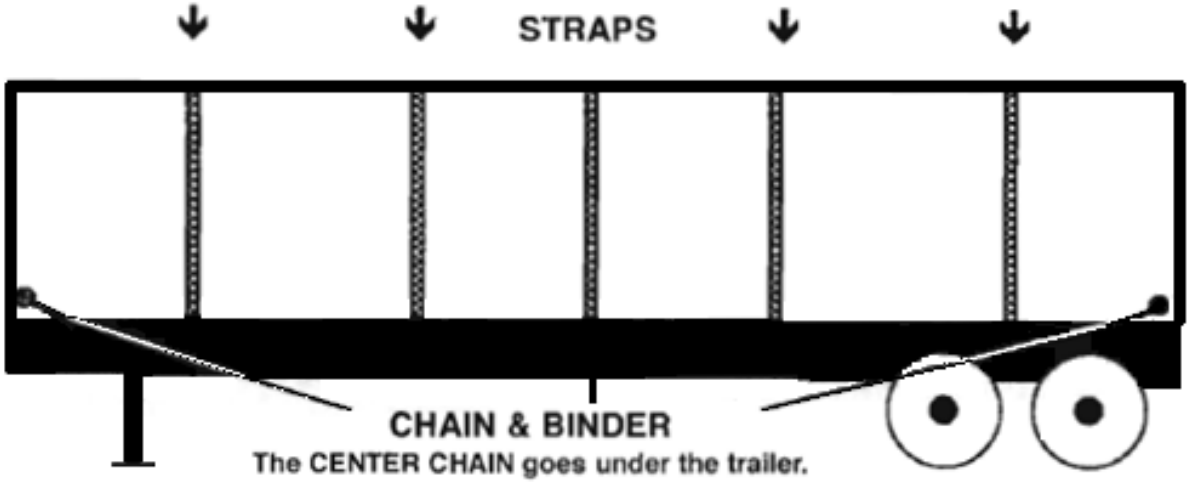


1. Feed chains through the holes in the bottom of the container, then go around the spool on the side of the trailer and hook the chain back onto itself. Place your binder on the chain so that you can close the binder while standing on the ground.

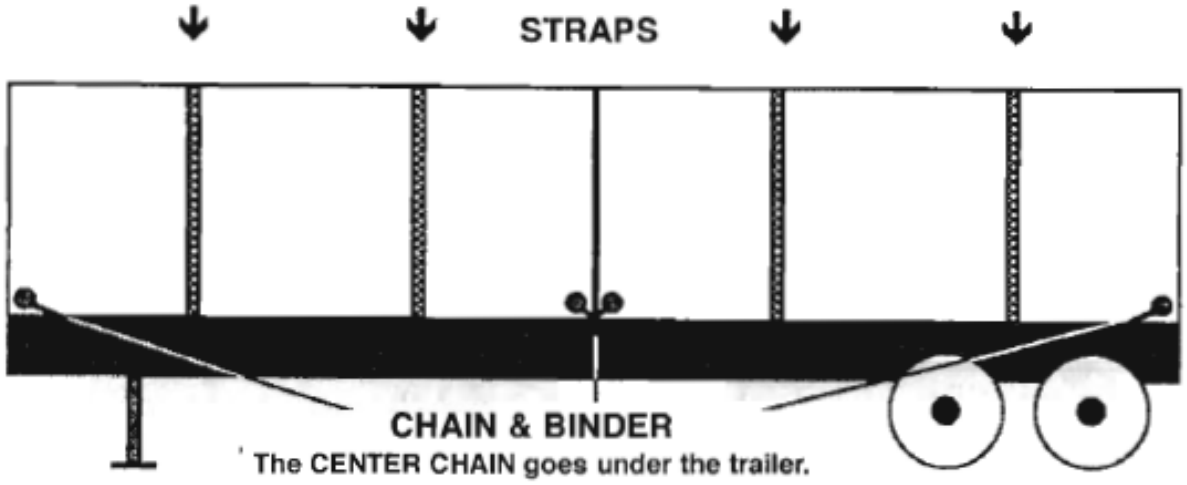
2. According to the size of the container, you will then throw straps over the top of the container.

CONTAINERS (Continued)

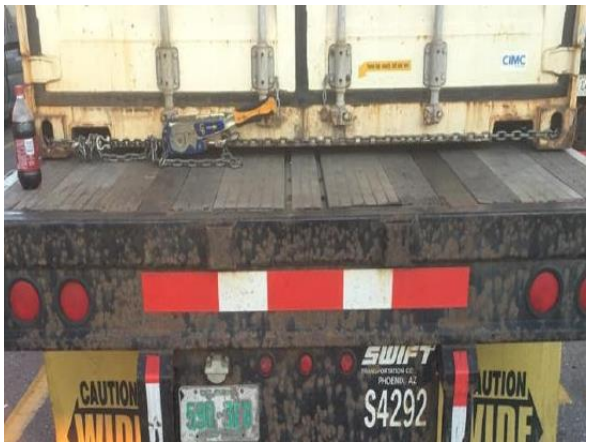
California Highway Approved Container Tie Down Method (cont.)



3. Two containers on a flatbed trailer:



CONTAINERS (CANS) (Continued)



CONTAINERS

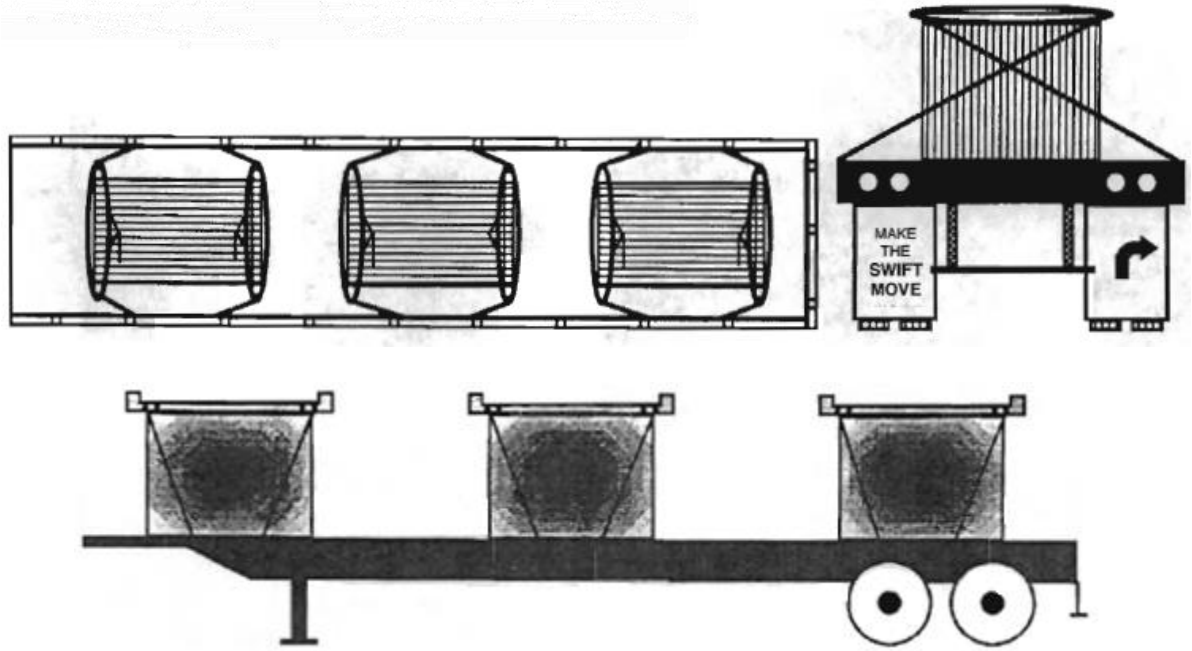
CONTAINERS

CONTAINERS

LOAD TYPES

COPPER ANODES

The copper anodes are secured together by the shipper and placed on the bed of the flatbed trailer in the upright position. The load will consist of three units of copper anodes. Each unit will need two chains with binders to secure the unit to the trailer. The copper anodes have what they call ears at the top of each anode, the chains are wrapped around the ears to secure the anode unit to the trailer (see diagram). The chain once wrapped around the ears of the anode is then secured to the trailer, causing the chain to be crisscrossed front and rear of the unit. The binder is then placed on TOP of the anode unit, for each chain, and locked into place.



COPPER CATHODES

Use dunnage to secure the copper cathodes, this will save the floor from damage. Ensure each row: has a strap or chain to secure the cathodes. The cathodes ride well, but do not stack more than two: units high. **IF STRAPS ARE USED, CORNER PROTECTORS MUST BE USED.**

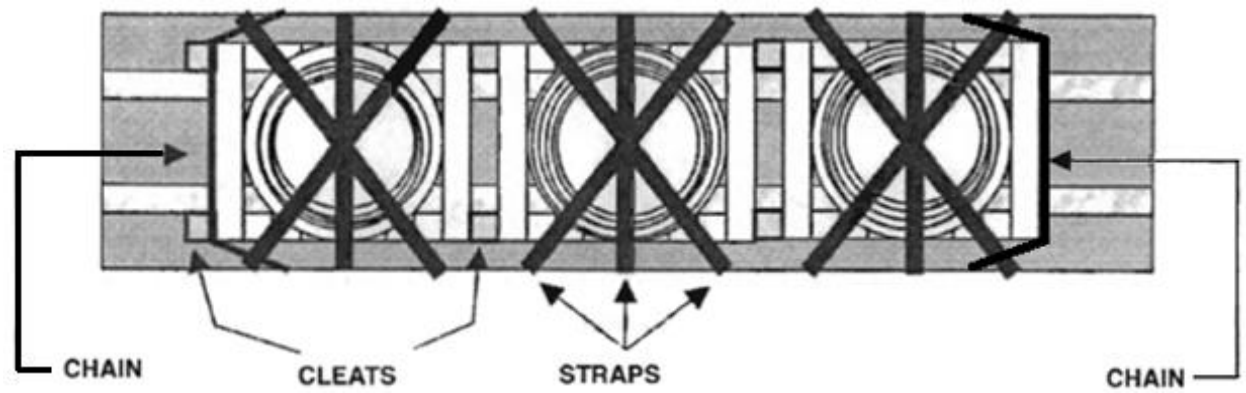
Stand clear of the forklift during loading, the cathodes can easily slip off the forks. Watch out for any acid that might still be on the cathodes.

LOAD TYPES

COPPER CATHODES

COPPER CATHODES **COPPER RODS**

COPPER COIL - Large Copper Coil (approx. 15,000 lbs.)



On the larger copper coils, crisscross two straps over the top of the coil and one strap directly over the top of the coil. Cleat the front of each pallet, and on the large coil, horseshoe a chain around the front and rear pallets to prevent forward/rearward movement and to assist the cleats.

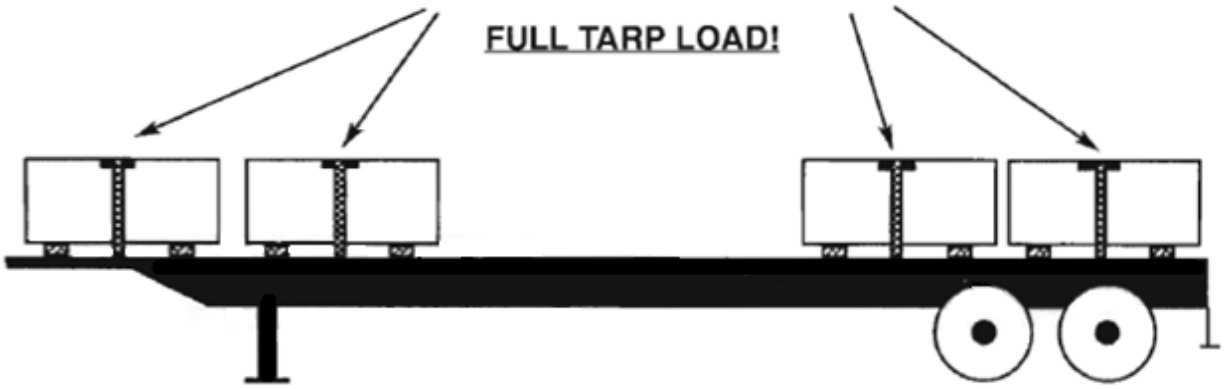
Smaller Copper Coil (7,000 to 8,000 lbs.)

On the smaller copper coil, cleat the front of each pallet. Throw two straps over the front coil as well as the back coil. The coils that are in the center of the two outside coils each get one strap.

THESE ARE A MUST TARP LOADS

COPPER STARTER SHEETS

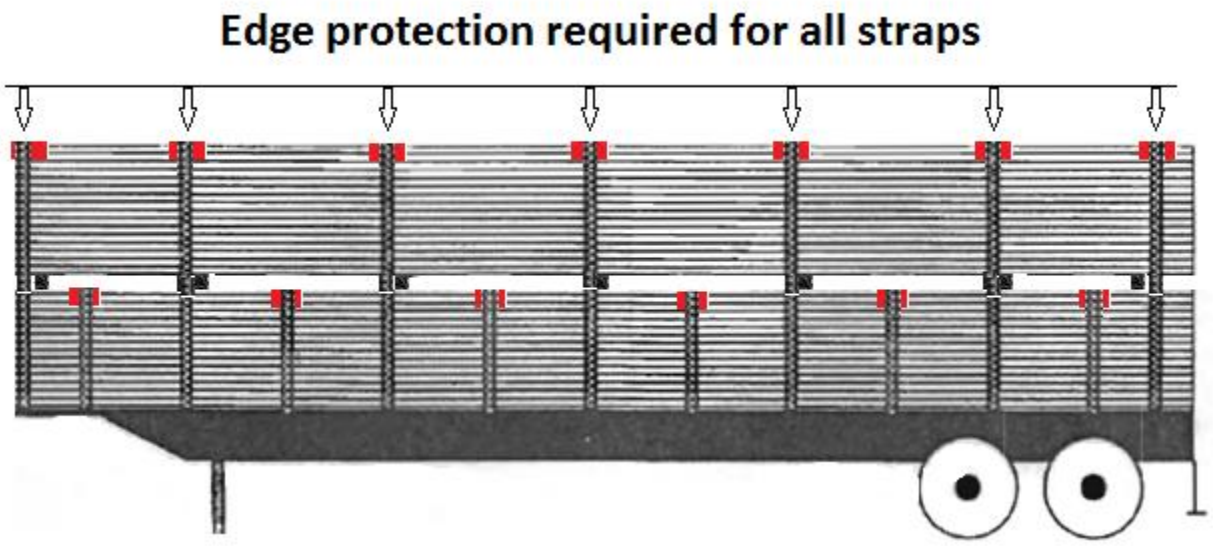
Use straps and dunnage to secure the load. Load above the axles groups due to the weight of the copper starter sheets. DO NOT DENT THE COPPER STARTER SHEETS. They must remain as flat as possible. Even though the starter sheets are pressed flat at the SX/EW plant prior to being used, there must not be any excessive damage. **USE CORNER PROTECTORS UNDER STRAPS.**



LOAD TYPES

WIRE MESH (8’ X 20’)

Strap down part of the load, then complete loading by securing the lower part of the load before securing the upper part. The load will not move from side to side as easily if the entire load was strapped from top to bottom. Check straps after 1 hour of driving. You might want to place a 4 x 4 under one of the straps on top of the load.



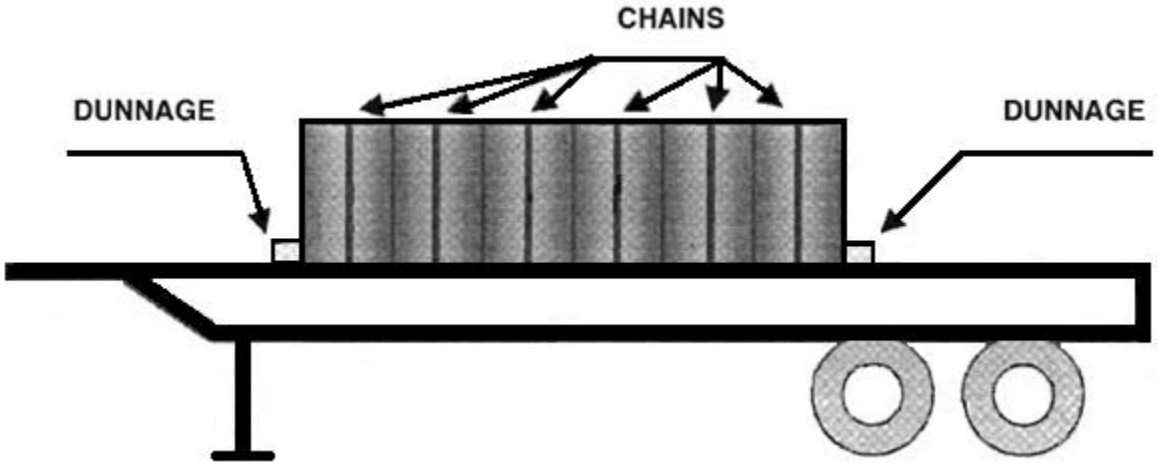
2 X 4 CAN BE PUT THROUGH MESH AND INTO STAKE POCKET, TO KEEP LOAD FROM MOVING.

NOTE: YOU MUST USE EDGE PROTECTORS UNDER STRAPS!

LOAD TYPES

DRUMS AND BARRELS

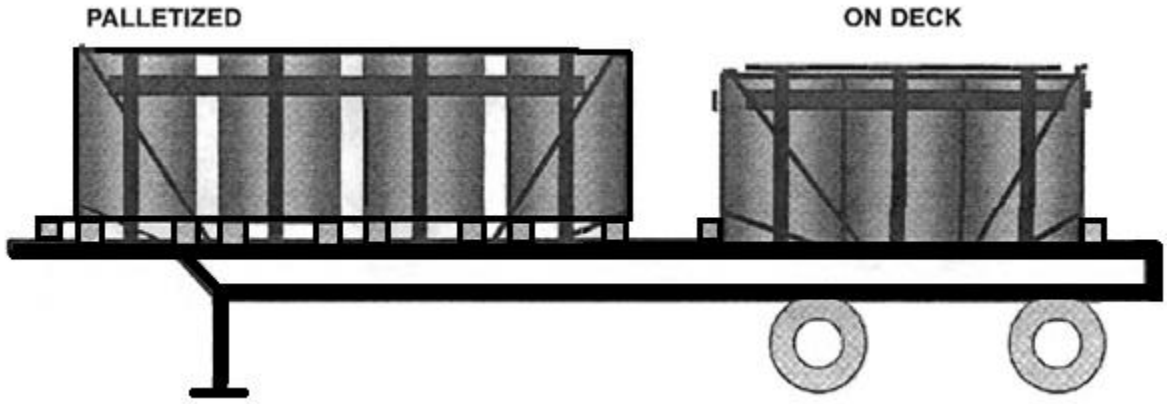
GRINDING BALLS (open drums)
To tie down open top drums filled with grinding balls (steel balls in varying sizes), dent the top lip of the drum so the chain can rest in the groove; otherwise, the chain will slip off the drum. Dent only the drums that are located on the sides of the trailer after they are loaded. Then chain over each row of drums. Strap dunnage in front of the load and in back of the load to stop forward and rear movement. Depending on the type of trailer deck being used (wooden or metal), nail 2x4s along side the load to box the drums in.



CLOSED OR LIDDED DRUMS

If these types of drums or barrels are loaded directly on the trailer deck, strap dunnage in front and in back of the load. V-board down the sides of the load as well as the front and back of the load. Strap over each row of drums and X-tie the front and back.

If these types of drums or barrels are loaded on pallets, block the front pallets with 4x4s or horseshoe a chain around the front pallets. V-board down the sides of the load as well as the front and back of the 1 1oad and cross tie the front and back of the load. Use straps over each row of drums.



LOAD TYPES

CLOSED OR LIDDED DRUMS (cont.)

BARRELS

NOTICE THE HEADER

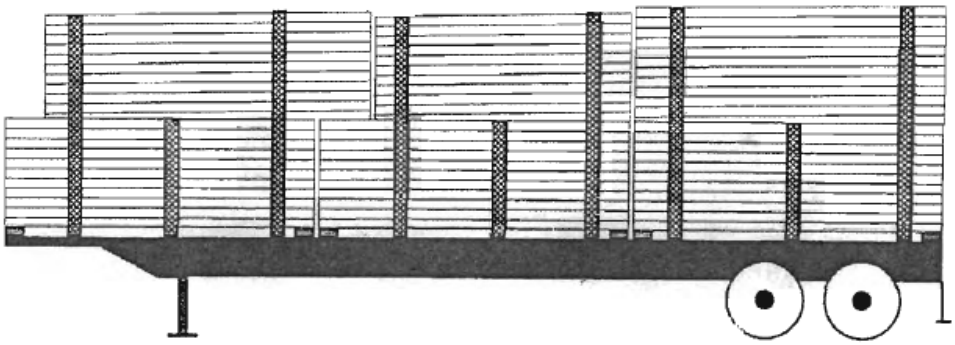
BARRELS

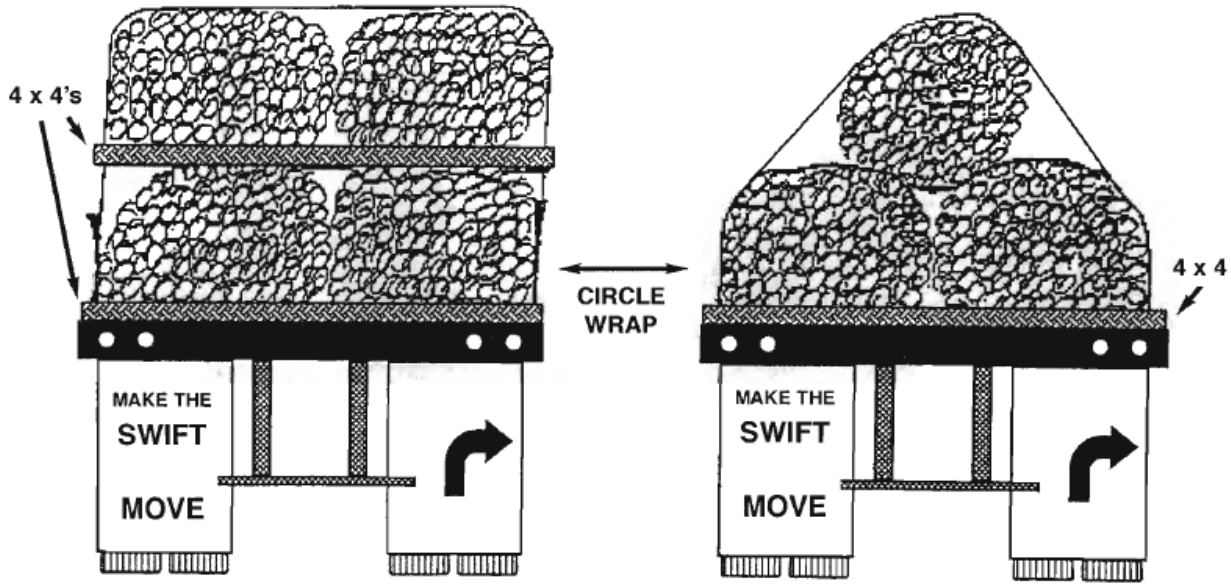
NOTES:

LOAD TYPES

POST AND POLES

The constant movement of the truck will cause the load to settle and become wider. To prevent the load from becoming wider, use 3' iron stakes to hold the load in. circle wrap using chains and binders if nylon straps are not long enough. Most loads of this type will require 9 chains with binders and all nylon straps. If each bundle is not packaged in a 4' x 4' square unit then the above procedure would be advised. Do not use 2 x 4's as dunnage. Use 4 x 4 dunnage for the second layer if the lower level is not housed in a wooden frame.





LOAD TYPES

TENSION CABLE (COILED)

Each coil requires two straps. Take the first strap through the middle of the coil, over the top of the coil, and then back to the winch to tie down. Take a second strap to the opposite side of the trailer and repeat the steps. Take the strap thru the middle of the coil, over the top of the coil, and back to the winch tie down. This procedure will stabilize the coil to the trailer. It pulls the coil on opposite sides and will keep the coils to the center of the trailer.

TENSION CABLE

TENSION CABLE

TENSION CABLE

TENSION CABLE (COILED) (CONT.)

TENSION CABLE

TENSION CABLE

TENSION CABLE

TENSION CABLE

LOAD TYPES

COTTON BALES & RECYCLED PAPER BALES

Loads of baled cotton and paper can be secured in the following manner:

Horizontal Bales - Horizontal bales shall be secured by at least two parallel longitudinal binders over the top of the load and by crossbinders as follows:

1. Loads more than one tier high, with horizontal bales laid crosswise in the top tier, shall not have less than four cross binders uniformly spaced across the top of the load, **see figure 1**.
2. Loads more than one tier high, with horizontal bales laid lengthwise in the top tier, must have one crossbinder placed near the midpoint of each bale, **see figure 2**.

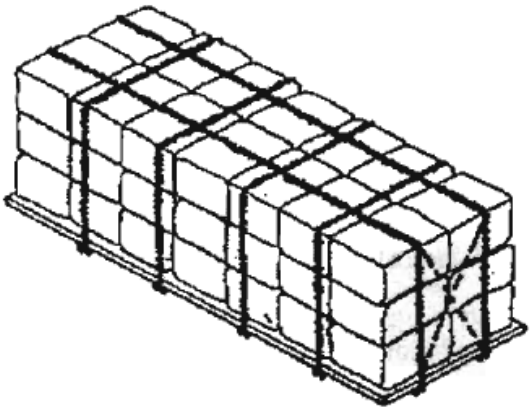


Figure 1

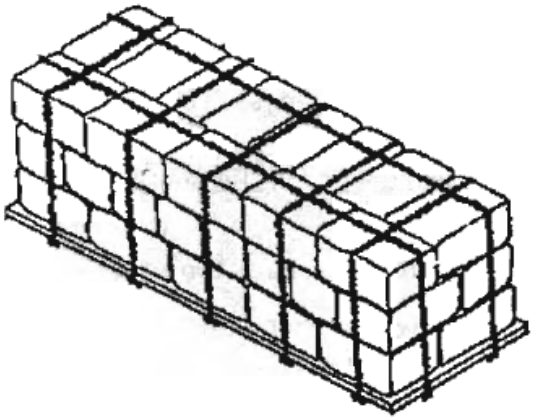


Figure 2

COTTON BAYLES

LOAD TYPES

VERTICAL BALES - IN ONE TIER

Loads of one tier of vertical bales must be secured to the trailer with two perimeter binders as follows:

(1) One perimeter binder shall be attached near the front right corner of the trailer bed, extended across the front of the load to a point not less than two- thirds of the height of the front left corner bale (measured from the trailer bed}, extended around the side at the same height to the near left corner bale of the load, and fastened near the rear right corner of the trailer bed, and;

(2) The second perimeter binder shall be attached near the front left corner of the trailer bed, extended across the front of the load to a point not less than two-thirds of the height of the right corner bale (measured from the trailer bed), extended around the side at the same height to the rear right corner bale of the load, and fastened near the rear left corner of the trailer bed, **see figure 3**.

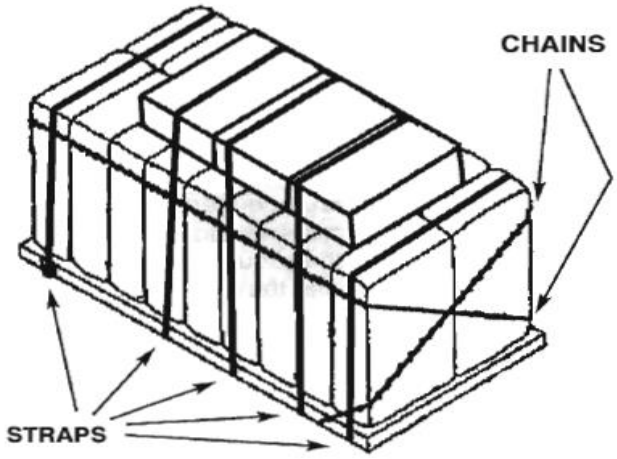


Figure 3

VERTICAL BALES - IN BOTTOM TIER

Multi-tiered loads with vertical bales in the bottom tier shall be secured to the trailer as follows:

(1) Loads with vertical bales two across in the bottom tier and vertical bales in the second tier:

(a) Not less than two longitudinal binders shall extend in parallel lines over the top of the load and may be crossed or parallel at the ends, and not less than four crossbinders shall be uniformly spaced over V-boards, **see figure 4**; or

(b) Two perimeter binders shall be applied to the top tier as prescribed in section "Vertical Bales in One Tier (1) & (2), and not less than four crossbinders shall be uniformly spaced across the top of the load, see figure 5.

(2) Multi-tiered loads with vertical and horizontal bales in the bottom tier and vertical bales in the top tier must be secured with two perimeter binders as prescribed in section "Vertical Bales - in One Tier (1) & (2), applied to the top tier and not less than four cross binders uniformly spaced across the top of the load, **see figure 5**.

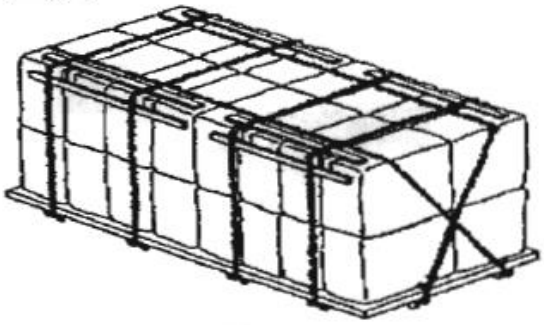


Figure 4

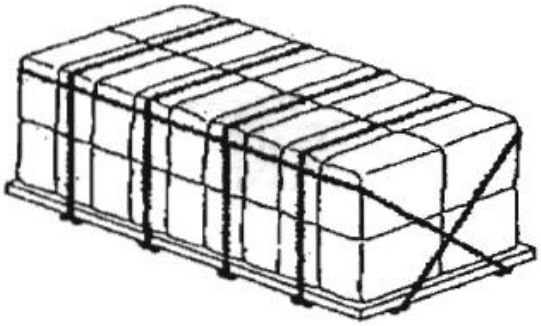


Figure 5

VERTICAL BALES - IN BOTTOM TIER (cont.)

(3) Loads with vertical bales two across in the bottom tier and horizontal bales in the tier(s) above, **see figure 6**:

(a) Not less than two longitudinal binders shall extend in parallel lines and may be crossed or parallel at the ends, and not less than four crossbinders shall be uniformly spaced over the length of the load.

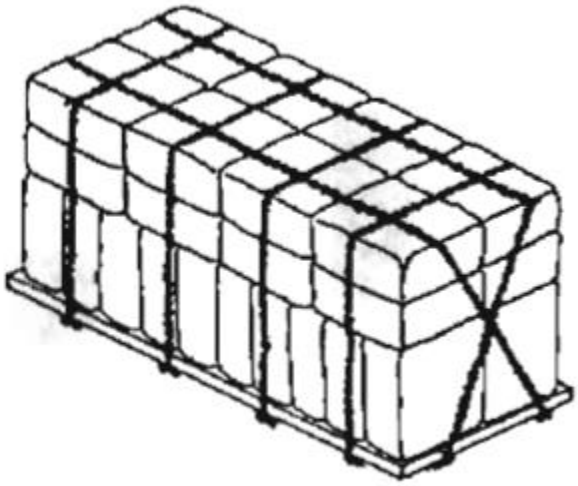


Figure 6

NOTES:

(4) Loads with vertical bales three or more across in the bottom tier and horizontal bales in the second tier, **see figure 7**:

(a) One perimeter binder shall be attached near the front right corner of the trailer bed, extended across the front of the load to a point not less than two-thirds of the height of the front lower corner bale (measured from the trailer bed), extended around the side at the same height to the rear lower left corner bale, fastened near the rear right corner of the trailer bed; and

(b) Another perimeter binder shall be attached near the front left corner of the trailer bed, extend-ed across the front of the load to a point not less than two-thirds of the height of the front lower right corner bale (measured from the trailer bed), extended around the side at the same height to the rear lower right corner bale, and fastened near the rear left corner of the trailer bed; and

(c) Not less than on crossbinder shall be uniformly placed near the midpoint of each bale stacked horizontally in the second tier. As an alternative, crossbinders may be placed over V-boards. When V-boards are used, not less than two crossbinders shall be placed over each V-board.

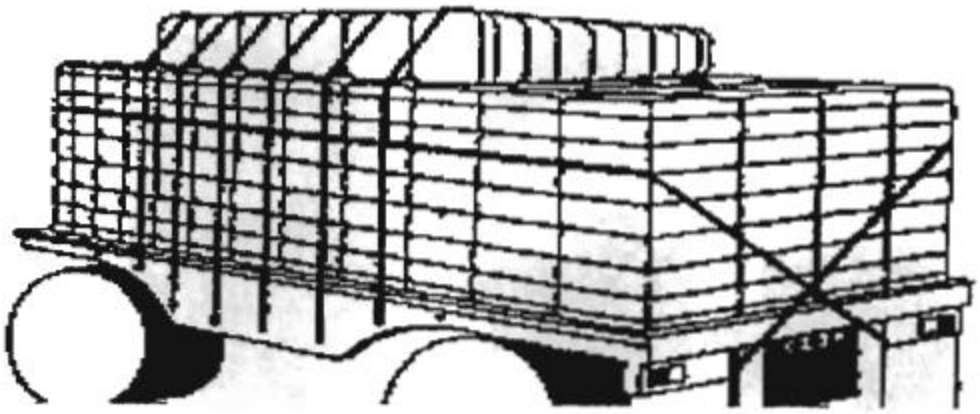
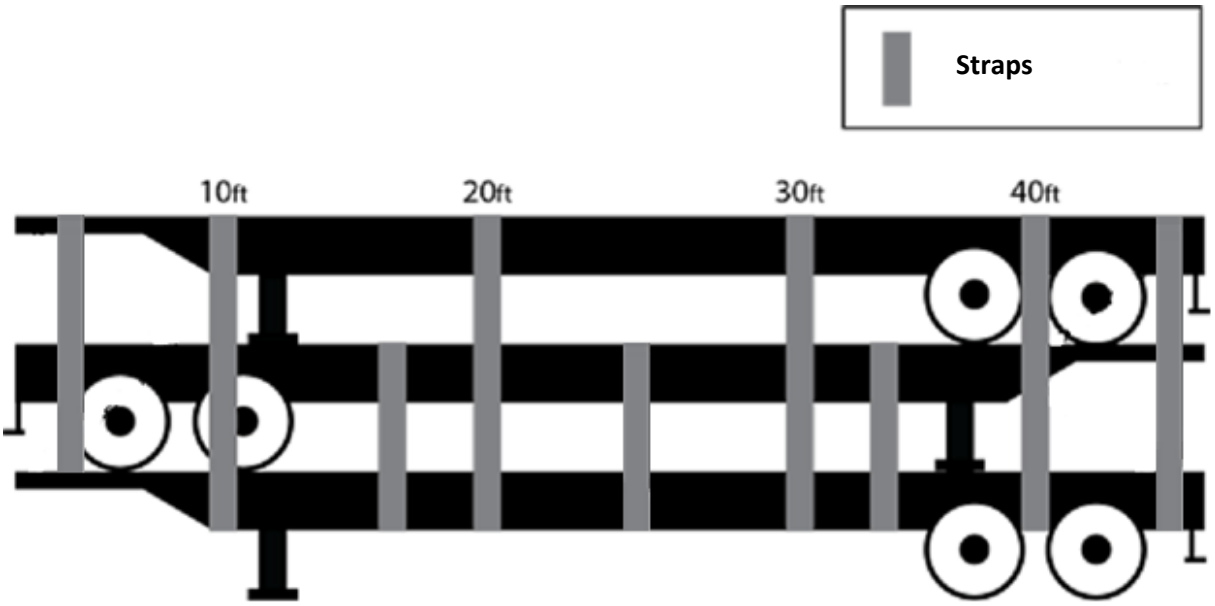


Figure 7

FLATBED TRAILER STACK

This will prevent the trailers from rolling. Use straps to secure the top two trailers to the bottom trailer.



You must follow the 10 rule and aways minimum 3 belly.

LOAD TYPES

FLATBED TRAILER STACK

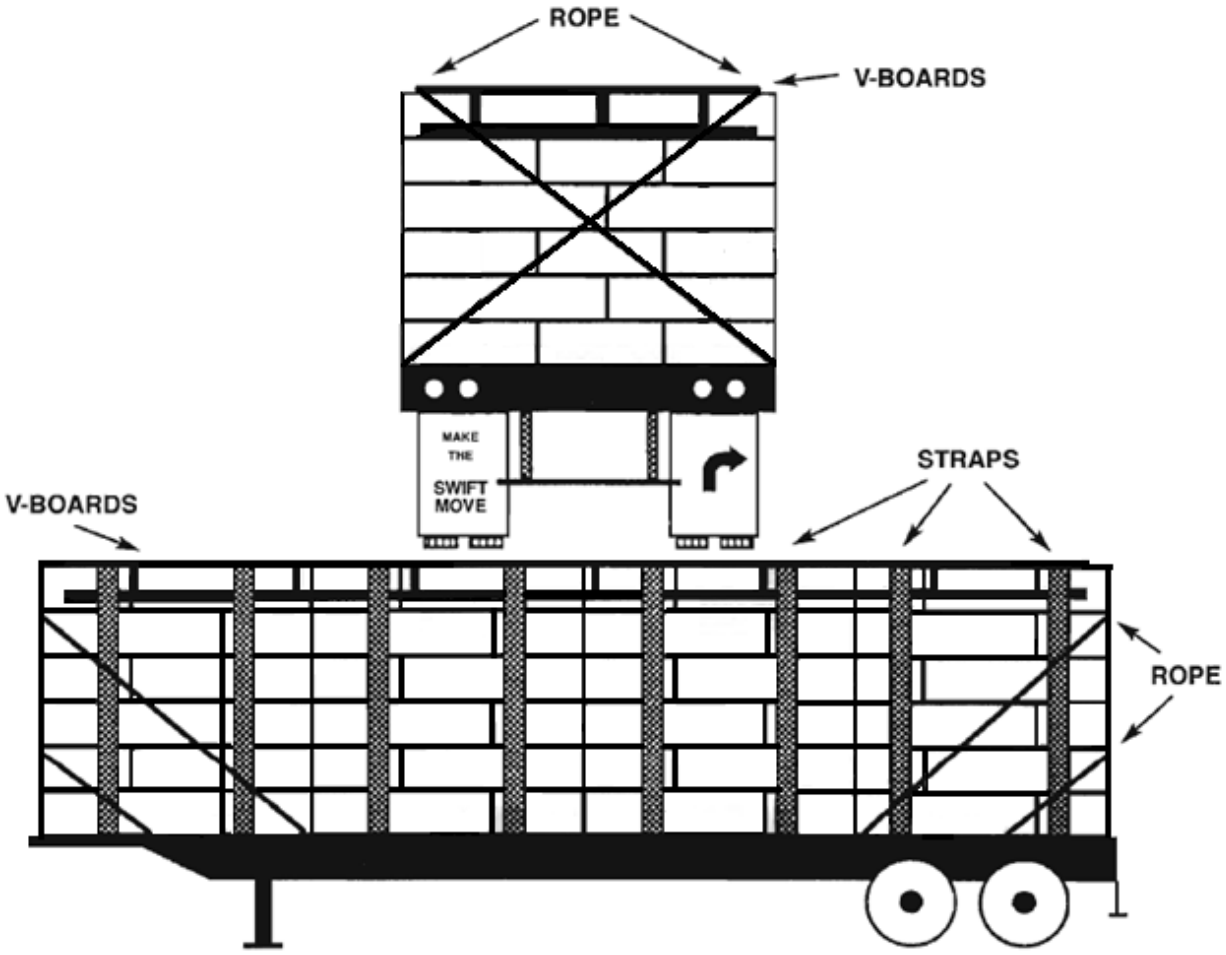
TRAILER STACK

TRAILER STACK

LOAD TYPES

HAY BALES

Place straps, uniformly spaced among bales, alternating evenly over the top of the bales with V- boards.



FLATBED PROCEDURES

Section Overview

In this section The table below lists the topics in this section.

DRIVER SPRINTER LOADING PROCEDURES

Sprinter Retrieval and Inspection

1. How to operate your Sprinter
   Ignition Location - Headlights, Wiper Switch, Seat Adjustment, and Mirror Adjustment Park Brake location to operation
   Foot on brakes to get into gear, gear shift location on the center console

2. How to determine where to stage your Sprinter on your trailer
   1. How to determine size
   2. How to load once size has been determined
   3. Sprinter length: SMALL MEDIUM LARGE

Sprinter Inspection Process

Front Inspection
1. Start at right front bumper
2. Inspect front bumper. Get down low to check the bottom of bumper on each side.
3. Check front hood, glass, back of mirrors, antenna for any damage, i.e. chips, scratches/dents. Check front for logo

Side Inspection

1. Proceed down either side. Inspect paint for chips, dents, scrapes; inspect door for key scratches. Make sure side logos are in place. Check tires for damage and tire is inflated. Make sure unit has mud flaps and hubcaps where applicable.

Rear Inspection

1. Inspect rear bumpers, door hinges, lase, if applicable. Check paint for scratches, dents or rubs.
2. Complete remaining side as stated above.

Cold Weather Starting

1. Turn key to on position
2. Wait for glow plug light to go out prior to starting
3. The glow plug is located on the right side of the instrument cluster

FLATBED PROCEDURES

SPRINTER HAUL-AWAY DRIVER TRAINING

Trainer Name:_____ Date: _____

1. **Side Rail Inspection**
   A. Check for damages and cracks
   B. Check top ramps and make sure the center supports are up and have their Dow pins. Make sure they can't fall down or they could damage your drive tires.

2. **Plate Inspection**
   A. Check top wheel plates. If two or more hinges are broken, secure with strap and get it repaired at nearest Swift Shop.

3. **Ramp Inspection and Set Up**
   A. Align even with crack between 2nd and 3rd board on left side. Align right side with left screw in 3rd board from right. Align even with trailer while loading.

4. **Air Bag Operation**
   A. Always set tractor and trailer brakes.
   B. Dump valve on right and rear side of trailer, after ramps are set in up. Flip this switch to lift trailer in up or down position to level ramp.

5. **Determine size of Sprinters how to load them**

Van	Cab Chassis
Small – 17'6"	Med – 20'6"
Med – 19'6"	Large – 22'6"
Large – 22'	

6. **Chain and binder Set-up**
   A. Damiler Chrysler requires 2 Pull Points in each direction with independent anchors. Insert chain in front hole or each A-frame on front of vehicle for "A" pull.
   B. Rear unit A-Pull from rear of vehicle. Put chain on each side of carrier housing coming from rear of vehicle. Put chain under the torsion bar and over the axle tube between the brake line bracket to the carrier housing.
   C. X-Pull chains to side rail of trailer.
   D. V-Pull from rear hole in the front A-Frame toward center of the vehicle.
   E. V-Pull same procedure except reverse direction of chain on rear axle. Two chains minimum are required in each direction: FRONT and REAR to secure the vehicle.

7. **Strap Installation, if applicable**
   A. Two straps are required in each direction for securing the vehicle. Put strap on each tire, A-pull secure with winch pulling forward on front axle and pulling toward the rear of unit. Make sure all straps are set at the 10+2 position like on a clock to pull strap tight until it indents about 3/16 of an inch into the tire. Two inch minimum spacing is required between each unit.

FLATBED PROCEDURES

SPRINTERS

SPRINTERS

SPRINTERS

FLATBED PROCEDURES

WELCOME TO FREIGHTLINER CUSTOM CHASSIS

1. Please obey Company speed limit of **10 MPH** at all times.
2. Proceed to the graveled drop trailer area and turn around. **DON'T STOP AFTER ENTERING INTO YARD.** Line up on the right side of black top.
3. Go to the crane house with your pickup number and destination. You will then be told when you will be loaded.
4. Make sure you have the correct type trailer for your load.
5. Have your chains & binders ready on your trailer before entering loading area.
6. Engine must be turned off while loading. Do not move unit until instructed to by the crane operator.
7. After loading, pull out of crane building and finish tying down.
8. Make sure **VIN** numbers match what is on paperwork.
9. Sign bills and proceed to guard house for departure.
10. Bills must be shown to guard before leaving the yard.
11. Hard hats and safety glasses are required to be worn in the loading area.

12.If you have questions please call 1-800-579-8614 – to Jeff or J. R.

FREIGHTLINER CUSTOM CHASSIS CHAINING PROCEDURE:

It is the policy of Freightliner that our chassis are to be chained down at certain points. This chaining procedure has been put into place to keep from damaging the chassis and to keep the load on the trailer. For this reason, there is no need for any changes to be made, or altering of chains.

All Swift employees have been trained by Freightliner and a loading shed supervisor (Jeff). If any changes need to be made on the chassis or to the trailer, the loading shed supervisor (Jeff) will make the changes. If you have any questions on the loading procedures, you need to seek assistance from (Jeff) your loading shed supervisor or an on-site manager (J. R.). Thank you for cooperation.

CRANE OPERATOR TRAINING

Crane Training will be required to train individuals on how to operate a stationary crane in a safe and proper manner. We will instruct the trainee on all safety issues along with demonstrating how to operate the crane. The training will be conducted at the Gaffney, Freightliner Plant. Here is an outline of how the training will be conducted .

I Verbal Instruction:

A. Identification of all the parts of the crane.
B. An overview of all safety procedures.
C. Verbally instruct the trainee on how to operate the crane.
D. Explain how and where to properly connect the straps to the chassis.

II Manual Demonstration:

A. Demonstrate how to operate the controls of the crane.
    1. Raise and Lower Crane
B. Instruct the trainee on connecting the straps to chassis.
C. Raise and Lower Chassis.

FLATBED PROCEDURES

CHASIS CHAINING PROCEDURES

Ill Observation:

A. Observe trainee operating the crane while following all safety procedures.

Bus Chassis Loads

Bottom Bus. Middle Bus. Top Bus. and Front Axle.

Chain around axle pulling back toward rear of chassis.

Rear End

Chain around rear end on each side of pumpkin. Pulling chains inward toward front of bus. Chains should be pulling inward in **V** position. Wheel wells are used in most all bus loads.

M-Frame Load Utility Vans

M-Frame Loads

May vary in length and size. Most common chaining procedure used is chaining around front axle and around rear ends on each side of pumpkin. S-Hooks may be used in loads of 3 or more; and up to 6 M-Frame chassis may be loaded on a load. S-Hooks are hooked in specific Holes in chassis to hook chains to chain down. Most common is **V** position. Pulling chains in opposite direction may be used.

XC and XC Raised Rail Chassis Motor Home Chassis

XC and XC Raised Rail chassis chaining down

Bottom chassis

(Rear end) cross chains, hook to rear end support arms. (Front end) chain around axle. Pulling rear end and front end in opposite direction from each other.

Middle chassis

(Rear of chassis) Hook chains around support arms front end of chassis hook chains around axle. Pulling chains in toward each other. (**V** position).

Top chassis on stand

(Rear end of chassis) Hook chains around rear end of chassis. Hooking chains tightly around rear end on each side of pumpkin. Crossing chains. Front end of chassis. Chain around axle. Chains should pull in toward each other. (**V** position). Wheel wells may or may not be used in loading XC or XC/Raised Rails depending on size and length of chassis.

FLATBED PROCEDURES

CHASIS CHAINING PROCEDURES

CHECK LIST and DO'S and DON'TS

Check all boards for proper position under wheel axles. Check for chains cutting into tires and rubbing on threads on tie rods. Check and make sure chains are not across or rubbing on fuel tanks, batteries, cables and air lines. Check for chains on brake lines and brackets that may be bent or broken.

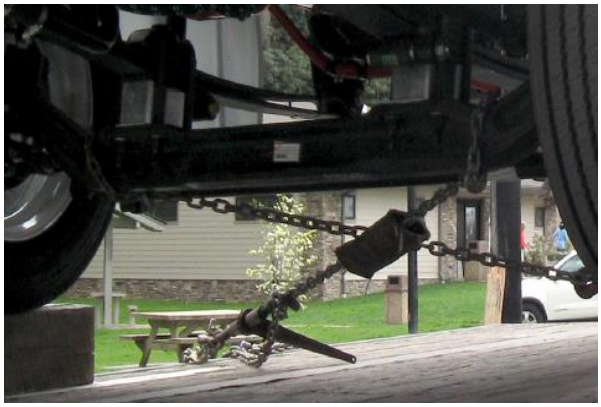
Do Not Move a load of preloaded chassis before properly chaining down load. Secure all boxes, tail pipes, seats, etc. Make sure all VIN's are on paperwork. If you do not know, ask someone who does. When chaining chassis to drop deck, you should use round spools, not pockets. Pockets may be used only if spools are not available.

When chaining and tightening chassis. Tighten chains simultaneously to avoid shifting of chassis. If chassis are not tightened in this manner, the chassis boards or chassis stand could shift and cause problems.

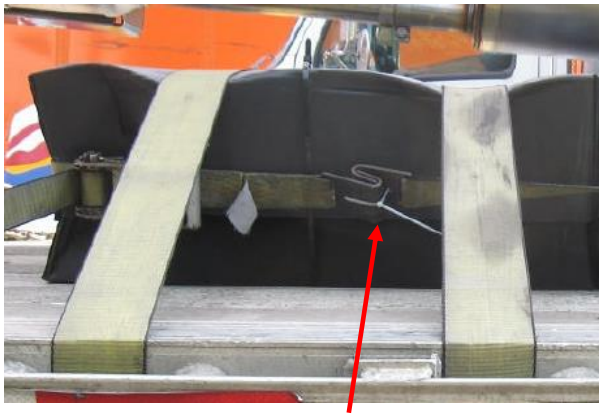
FLATBED PROCEDURES

CHASSIS

CHASSIS



CHASSIS



CHASSIS – note zip-tie

CHASSIS

FLATBED PROCEDURES

CHASSIS

CHASSIS

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FLATBED PROCEDURES

COILED BANDING

COILED BANDING

COILED BANDING

COILED BANDING

COILED STEEL

COILED STEEL

FLATBED PROCEDURES

SHINGLES

SHINGLES

SHINGLES

SHINGLES

SHINGLES

SHINGLES

FLATBED PROCEDURES

LIFT GATES

LIFT GATES

LIFT GATES

LIFT GATES

LIFT GATES

LIFT GATES

FLATBED PROCEDURES

FRAME RAILS

FRAME RAILS

FRAME RAILS

FRAME RAILS

FRAME RAILS

FRAME RAILS

FLATBED PROCEDURES

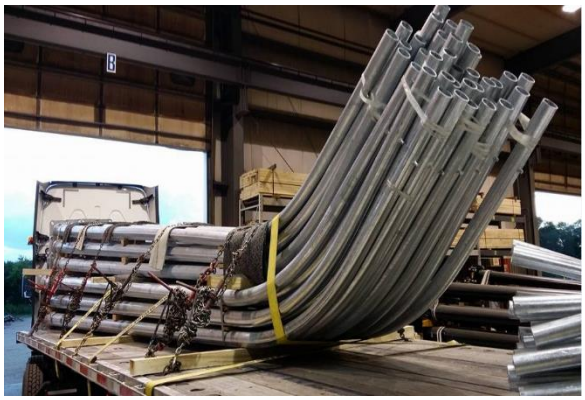
GENERATORS

GENERATORS

VEHICLE FRAMES

VEHICLE FRAMES

LIGHT POLES



LIGHT POLES

FLATBED PROCEDURES

FLATBED PROCEDURES

STACKED TEAMS

STACKED TEAMS

OVERSIZE QUICK REFERENCE GUIDE

Please call permits at 800-557-1254 to verify overhang for each you will travel.

ALABAMA	F.O.H. + R.O.H. = Total 5' Maximum
Authorized Travel	**NO NIGHT TRAVEL** **Permitted load CAN** travel Monday thru Saturday Daylight hours only **NO** Sunday movement
Escorts	Required over 12' wide & 16' high
ARIZONA	3' F.O.H. 6' R.O.H.
Authorized Travel	**CAN** run nights & weekends if under 10' wide, 14' high, & under 10' R.O.H. Anything over is restricted to **NO** nights or weekends
Escorts	Required over 14' wide & 16' high
ARKANSAS	F.O.H. & R.O.H. – ARE EXEMPT NO permit is required for material up to 80' long
Authorized Travel	**NO NIGHT TRAVEL** **CAN** travel sunrise to sunset Monday thru Sunday
Escorts	Required over 14' wide & 15' high
CALIFORNIA	4' F.O.H. 10' R.O.H.
Authorized Travel	**CAN** travel nights & weekends up to 12' wide, anything over is restricted to **NO** nights or weekends
Escorts	Required over 12' wide & 18' high
COLORADO	4' F.O.H. 10' R.O.H.
Authorized Travel	**CAN** travel nights & weekends up to 12' wide with proper lighting Anything over is restricted to **NO** nights or weekends
Escorts	Required over 13' wide & 16' high
CONNECTICUT	3' F.O.H. 4' R.O.H.
Authorized Travel	**NO NIGHT** or **WEEKEND TRAVEL** Sunrise to sunset weekdays only
Escorts	Required over 12' wide & 14' high
DELAWARE	3' F.O.H. 6' R.O.H.
Authorized Travel	**NO NIGHT** or **WEEKEND TRAVEL** Sunrise to sunset weekdays only
Escorts	Required over 12' wide & 15' high

OVERSIZE QUICK REFERENCE GUIDE

Please call permits at 800-557-1254 to verify overhang for each you will travel.

D.C.	3’ F.O.H. 6’ R.O.H.
Authorized Travel	**CAN** run night & weekends up to 12’ wide
Escorts	Required over 12’ wide & 13’ 6” high

FLORIDA	3’ F.O.H. 3’ R.O.H.
Authorized Travel	**NO NIGHT TRAVEL** Sunrise to sunset weekdays **only** Saturday until noon & **NO** Sunday travel
Escorts	Required over 12’ wide & 16’ 6” high

GEORGIA	F.O.H. R.O.H. – EXEMPT No over length permit required for structural material up to 75’ long
Authorized Travel	**NO NIGHT TRAVEL** Sunrise to sunset Monday thru Saturday No Sunday travel allowed
Escorts	Required over 12’ wide & 15’ 6” high

IDAHO	4’ F.O.H. 10’ R.O.H. – from center of last axle to end of load
Authorized Travel	If 10’ wide or under **CAN** run 24 hrs 7 days a week Anything over is restricted to daylight hrs only but can run 7 days a week
Escorts	Required 2 lane hwy – over 14’ wide 4 lane hwy – over 15’ wide & 16’ high

ILLINOIS	F.O.H. R.O.H. – EXEMPT – **NO** over length permit required for structural material up to 80’ long
Authorized Travel	Daylight hours only Monday thru Friday **CAN** run until noon on Saturday **NO** Sunday travel allowed
Escorts	Required over 14’ 6” wide & 14’ 6” high

INDIANA	3’ F.O.H. 4’ R.O.H.
Authorized Travel	**NO NIGHT TIME TRAVEL** Sunrise to sunset Monday thru Friday **CAN** run until noon on Saturday if under 10’ wide **CAN** run on Sunday
Escorts	Required over 12’4” wide & 14’ 6” high

OVERSIZE QUICK REFERENCE GUIDE

Please call permits at 800-557-1254 to verify overhang for each you will travel.

IOWA	3’ F.O.H. 4’ R.O.H.
Authorized Travel	**CAN** run 24 hrs 7 days a week up to 11’ wide & 14’4” high **anything else** Is restricted to daylight movement only
Escorts	Required over 14’ wide & 14’4” high
KANSAS	F.O.H. R.O.H. – EXEMPT – No permit required for structural material up to 85’ long
Authorized Travel	Sunrise to sunset Monday thru Sunday No night time movement allowed
Escorts	Required over 12’ wide & 17’ high
KENTUCKY	3’ F.O.H. 5’ R.O.H.
Authorized Travel	Daylight hours only Monday thru Friday **CAN** run until noon on Saturday **NO** Sunday travel allowed
Escorts	Required over 12’ wide & 15’ high
LOUISIANA	4’ F.O.H. 8’ R.O.H.
Authorized Travel	**CAN** run Sunrise to Sunset 7 days a week **NO NIGHT TRAVEL ALLOWED**
Escorts	Required over 12’ wide & 15’ high
MAINE	F.O.H. R.O.H. 74’ overall length of vehicle 53’ trailer 69’ overall length of vehicle 48’ trailer
Authorized Travel	**NO NIGHT TRAVEL ALLOWED**
Escorts	½ hour **BEFORE** sunrise to ½ hour **AFTER** sunset Monday thru Saturday – **NO** Sunday travel Required over 11’11” wide & 14’6” high
MARYLAND	3’ F.O.H. 6’ R.O.H.
Authorized Travel	**NO NIGHT TRAVEL ALLOWED** ½ hour **AFTER** sunrise to ½ hour **BEFORE** sunset Monday thru Friday Saturday until noon – **NO** Sunday travel
Escorts	Required over 13’ wide & 14’6” high

OVERSIZE QUICK REFERENCE GUIDE

Please call permits at 800-557-1254 to verify overhang for each state you will travel.

MASSACHUSETTS	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Monday 12:01 am to 12:00 noon on Saturday If over 12’ wide restricted to no night travel **NO** Sunday travel
Escorts	Required over 12’ wide & 13’6” high

MICHIGAN	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Friday **NO** weekend travel allowed
Escorts	Required over 12’ wide & 14’5” high

MINNESOTA	3’ F.O.H. NO LIMIT ON REAR OVERHANG **Although overhang must be flagged & lighted at all times**
Authorized Travel	Sunrise to sunset Monday thru Saturday Until noon on Sunday
Escorts	Required over 14’6” wide & 15’ high

MISSISSIPPI	3’ F.O.H. NO R.O.H. LIMIT IN DAYTIME 4’ R.O.H. AT NIGHT TIME
Authorized Travel	½ hour **BEFORE** sunrise to ½ hour **AFTER** sunset Monday thru Saturday – **NO** Sunday travel
Escorts	Required over 12’ wide & 14’ high

MISSOURI	3’ F.O.H. 4’ R.O.H.
Authorized Travel	½ hour **BEFORE** sunrise to ½ hour **AFTER** sunset Monday thru Sunday – **EXCEPT** in metropolitan & tourist areas
Escorts	Required over 12’4” wide & 15’ high

MONTANA	3’ F.O.H. 4’ R.O.H. –Over 75’ needs permit
Authorized Travel	Travel allowed 24 hrs 7 days a week for loads that **DO NOT** exceed 9’ wide, 110’ long, or 14’6” high. Anything over will have restrictions.
Escorts	Required over 14’ wide & 17’ high

NEBRASKA	NO LENGTH LAW – No permit requried for over length **BUT** must be **lighted** and **flagged** at all times!
Authorized Travel	½ hour **BEFORE** sunrise until ½ hour **AFTER** sunset. Saturday until 1:00 pm only **NO** Sunday travel
Escorts	Required over 12’ wide & 14’6” high

OVERSIZE QUICK REFERENCE GUIDE

Please call permits at 800-557-1254 to verify overhang for each you will travel.

NEVADA	10’ R.O.H. – (Must be under 70’ overall then NO permit required)
nAuthorized Travel	Monday thru Sunday if under 10’ wide, 14’ high & 75’ long overall All other oversize restricted to daylight
Escorts	Required over 14’ wide & 17’ high
NEW HAMPSHIRE	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Friday **NO** weekend travel allowed
Escorts	Required over 12’ wide & 13’6” high
NEW JERSEY	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Friday Saturday until noon **NO** travel Sunday
Escorts	Required over 14’ wide & 13’6” high
NEW MEXICO	3’ F.O.H. 7’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Saturday **NO** travel Sunday
Escorts	Required over 14’ wide & 15’ high
NEW YORK	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Friday Saturday until noon – **NO** travel Sunday
Escorts	Required over 12’ wide & 15’ high
NORTH CAROLINA	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Saturday **NO** Sunday travel
Escorts	Required over 12’ wide & 13’6” high
NORTH DAKOTA	NO OVER LENGTH ALLOWED. Permit required for any over hang.
Authorized Travel	Sunrise to sunset 7 days a week
Escorts	Required over 14’6” wide & 18’ high

OVERSIZE QUICK REFERENCE GUIDE

Please call permits at 800-557-1254 to verify overhang for each state you will travel.

OHIO	3’ F.O.H. 4’ R.O.H – Structural material up to 80’ long exempt
Authorized Travel	Sunrise to sunset 7 days a week
Escorts	Required over 13’ wide & 14’6” high
OKLAHOMA	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Sunrise to sunset 7 days a week
Escorts	Required over 12’ wide & 17’ high
OREGON	4’ F.O.H. 5’ R.O.H.
Authorized Travel	Sunrise to sunset 7 days a week
Escorts	Required over 14’ wide & 15’ high
PENNSYLVANIA	3’ F.O.H. 6’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Friday Saturday until noon – **NO** Sunday travel
Escorts	Required over 13’ wide & 14’6” high
RHODE ISLAND	3’ F.O.H. 6’ R.O.H. Structural material except up to 80’
Authorized Travel	Sunrise to sunset Monday thru Friday **NO** weekend travel allowed
Escorts	Required over 12’ wide & 14’ high
SOUTH CAROLINA	6’ F.O.H. 6’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Saturday **NO** Sunday travel
Escorts	Required over 12’ wide & 14’6” high
SOUTH DAKOTA	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Sunday If under 10’ wide & 14’6” high **CAN** run nights and weekends
Escorts	Required over 16’ wide & 15’ high
TENNESSEE	Any F.O.H. or R.O.H. will require a permit
Authorized Travel	Sunrise to sunset Monday thru Saturday **NO** travel on Sunday
Escorts	Required over 14’ wide & 15’ high

OVERSIZE QUICK REFERENCE GUIDE

Please call permits at 800-557-1254 to verify overhang for each state you will travel.

TEXAS	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Saturday
Escorts	Required over 14’ wide & 17’ high
UTAH	No rule on F.O.H. 6’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Sunday If at 10’ wide, 92’ long, or 14’ high **CAN** run 24 hrs a day
Escorts	Required over 12’ wide on state routes & 14’ wide on 4 lane highways 16’ high
VERMONT	F.O.H. R.O.H. Cannot exceed 1/3 total vehicle length
Authorized Travel	Sunrise to sunset Monday thru Friday **NO** weekend travel allowed
Escorts	Required over 12’ wide & 14’ high
VIRGINIA	3’ F.O.H. 4’ R.O.H. Cannot exceed 1/3 total vehicle length
Authorized Travel	Sunrise to sunset Monday thru Friday Saturday until noon – **NO** Sunday travel
Escorts	Required over 12’ wide (2 lane) 10’ wide (4 lane) & 14’ high
WASHINGTON	3’ F.O.H. Any R.O.H. requires a permit
Authorized Travel	Sunrise to sunset Monday thru Thursday Friday until 3:00 pm Sunrise to sunset Saturday & Sunday If under 10’ wide **CAN** run at night
Escorts	Required over 11’ wide (2 lane) 14’ wide (4 lane) & 14’ high
WEST VIRGINIA	3’ F.O.H. 6’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Friday **NO** weekend travel allowed
Escorts	Required over 10’6” wide (2 lane) 12’ wide (4 lane) & 13’9” high
WISCONSIN	3’ F.O.H. 4’ R.O.H.
Authorized Travel	Sunrise to sunset Monday thru Friday If under 100’ long, 12’ wide or 13’6” high **CAN** travel nights and weekends
Escorts	Required over 15’ wide & 15’ high

OVERSIZE QUICK REFERENCE GUIDE

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WYOMING	60’ load & trailer length law No permit required if load is 60’ or under
Authorized Travel	Sunrise to sunset Monday thru Sunday If under 10’ wide may travel at night with flags and proper lighting
Escorts	Required over 14’ wide & 15’ high

ALWAYS READ YOUR PERMITS

FLATBED TIE DOWN MANUAL
DRIVER'S RECEIPT

The issuance and receipt of this FLATBED TIE DOWN MANUAL shall not be deemed to be a contract between employer (Swift Transportation Co. of AZ, LLC) and employee (so noted below). Nothing herein contained shall be deemed to give any employee the right to be retained in the employ of the employer or to interfere in the right of the employer to discharge any employee at any time. These policies and procedures are guidelines for our employees to follow. The contents of this manual may be changed, amended, or added to, by the company when deemed so necessary to do so. You must read and fully understand all parts of this manual that apply to your employment with our company. If you do not understand any part of this manual, contact your Driver Manager for clarification.

Please signify that you understand all points of this manual and that you are in agreement with all policies and procedures, which are a condition of your employment by signing below.

_____ _____

Signature Date

_____

Print Name

_____ _____

Witnessed By Date