



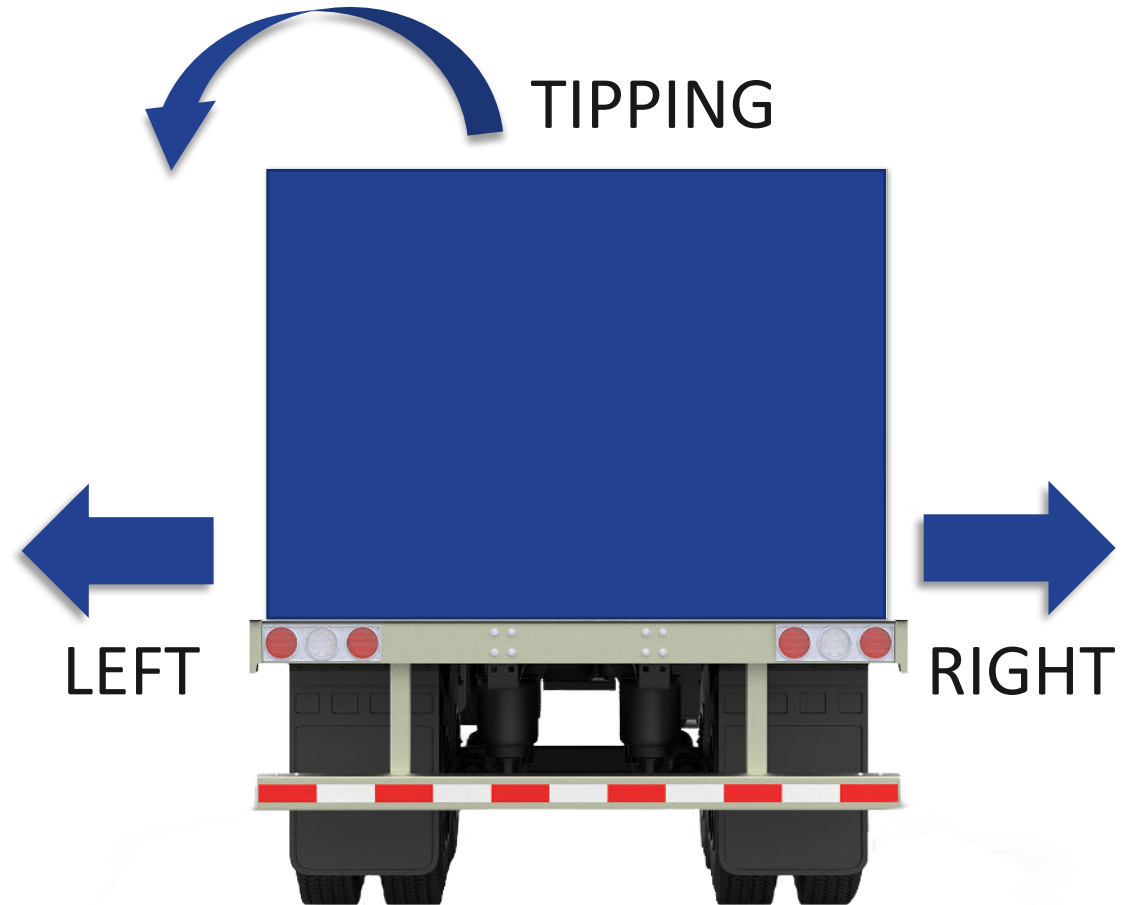
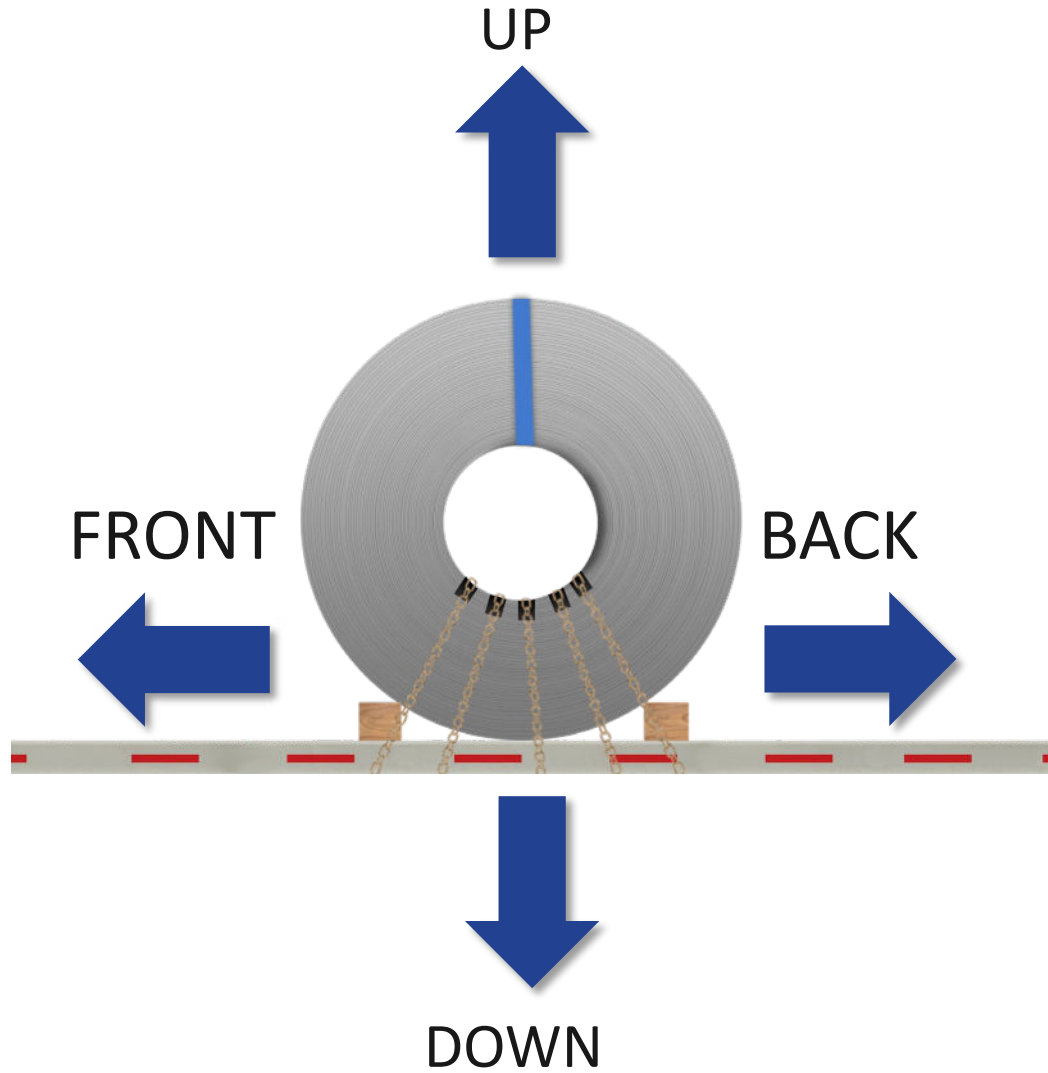
LOAD SECUREMENT PHASE-1

LOAD SECUREMENT REQUIREMENTS

Federal Motor Carriers Safety Regulation (FMCSR) Part 393.100 requires that all cargo transported on a commercial vehicle must be secured in a manner that prevents the cargo from shifting (moving) in any direction. This must be accomplished by use of authorized securement devices that have a Working Load Limit (WLL) assigned by the manufacturer.

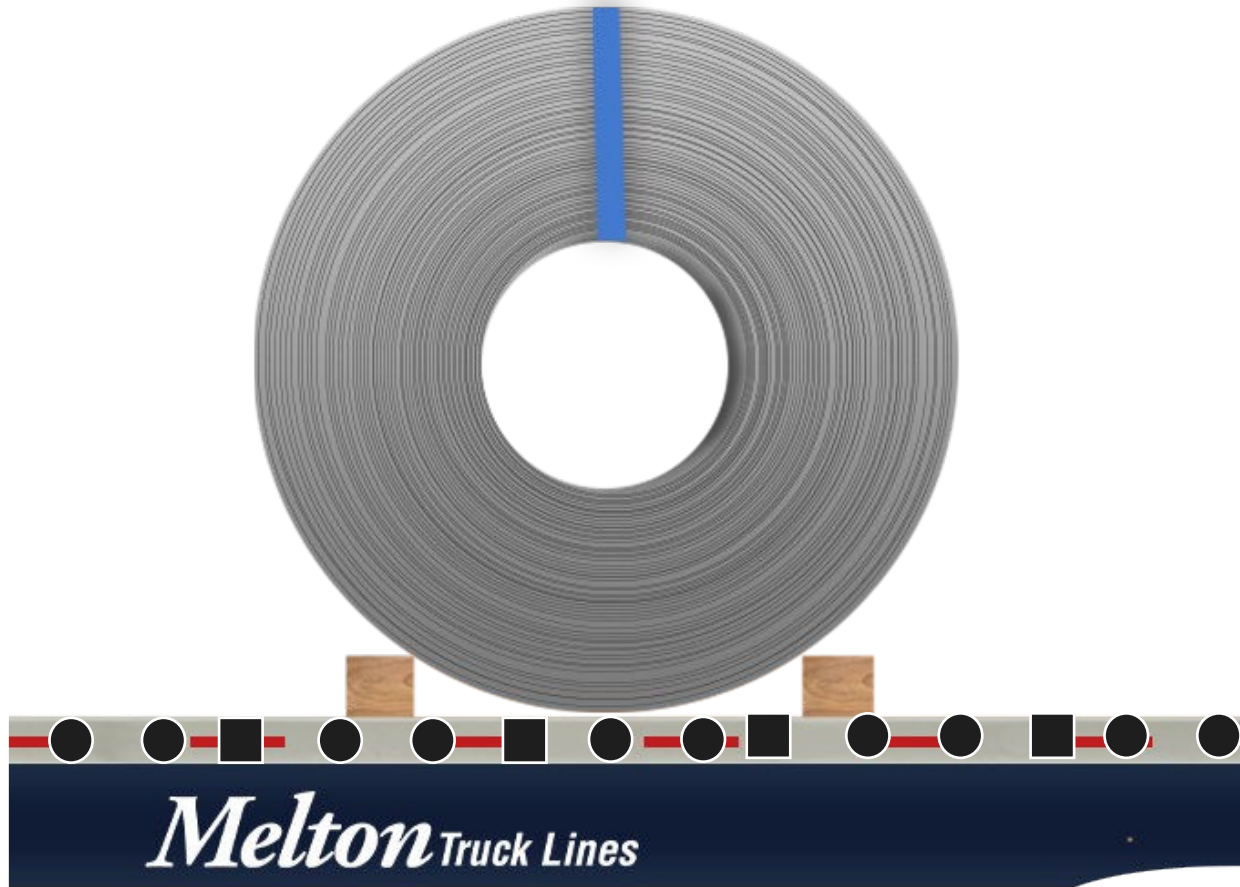
Objective – Make the load part of the trailer.

DIRECTIONS OF MOVEMENT



Which do you think is the most important?

MELTON WORKING LOAD LIMIT (WLL)



- Securement will always be rated by the device with the lowest Working Load Limit.
- The rub rail, spools and stake pockets of the trailers are rated at 4,000 lbs.

SECUREMENT DEVICES



Metal Chain – used on metal coils and many steel products. We rate these at 4,000 lbs of securement.



Chain Binder – used to apply and adjust tension on chains.



4-Inch Webbed Strap – used on sensitive products that require a little give or more granular adjustment. Also rated as 4,000 lbs of securement.

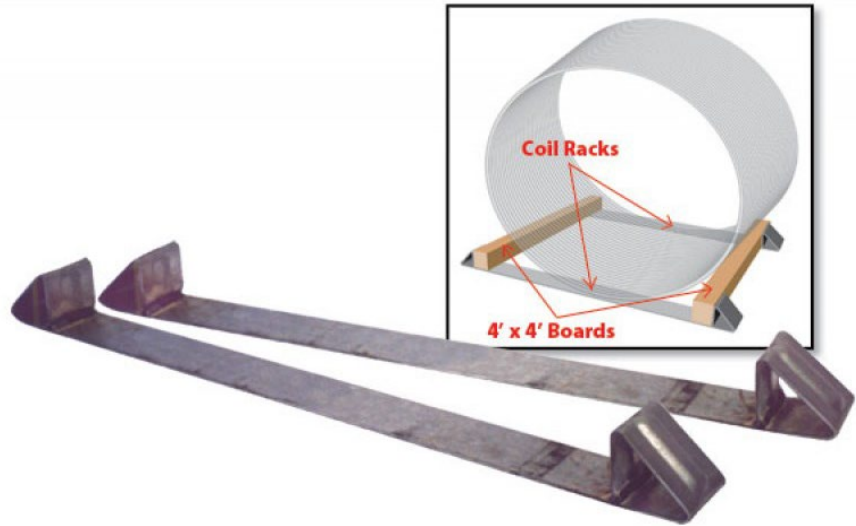


Strap Winch – device mounted to the trailer used to tension straps.



2- Inch Ratchet Strap – used on sensitive products that require additional securement. Rated at 2,000 lbs of securement.

SECUREMENT EQUIPMENT



Coil Racks – Support metal coils above the deck of the trailer to prevent rolling. Each rack supports 10,000 lbs. Two minimum.



Pad-pad-pad – Protect the freight from the securement. Protect the securement from the freight. No excuses, be creative, scrounge if you have to.

MELTON LOAD SECUREMENT REQUIREMENTS

- Securement strap must be placed between the rub rail and trailer's deck and attached to the rub rail.
- Loads must adhere to the **5' Rule** when applicable:
 - 2 pieces of securement within first 5' of the load.
 - 2 pieces of securement within last 5' of the load.
 - 1 piece of securement every 5' for the rest of the load.
- Securement chains must be secured to stake pockets or spools.
- Securement must be tightened using Alternating Pull (equal pull on each side of trailer).
- Loads must be well padded to prevent strap, chain, tarp and load from being damaged.

STAKE POCKETS, SPOOLS & RUB RAIL



SPOOLS

RUB RAIL

STAKE POCKETS

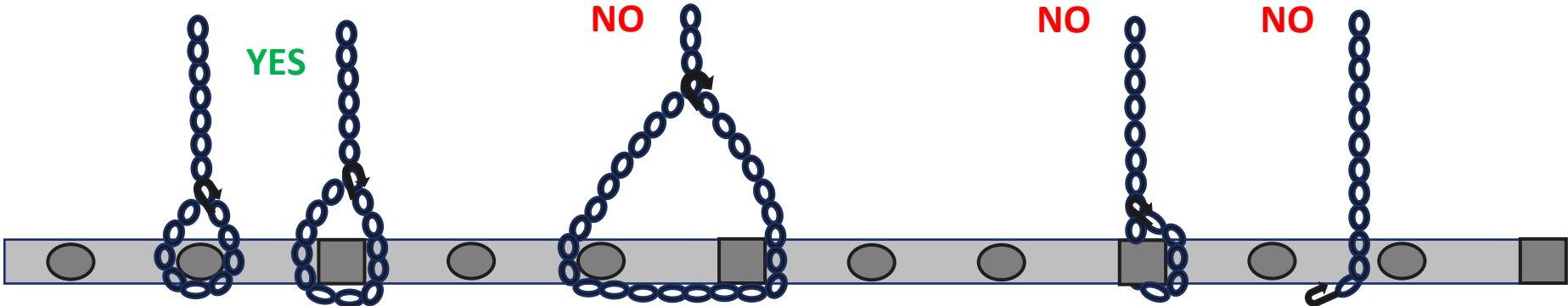
SECUREMENT PLACEMENT



**DO NOT—DO NOT—DO NOT,
attach strap hooks to
anything but the rub rail.**



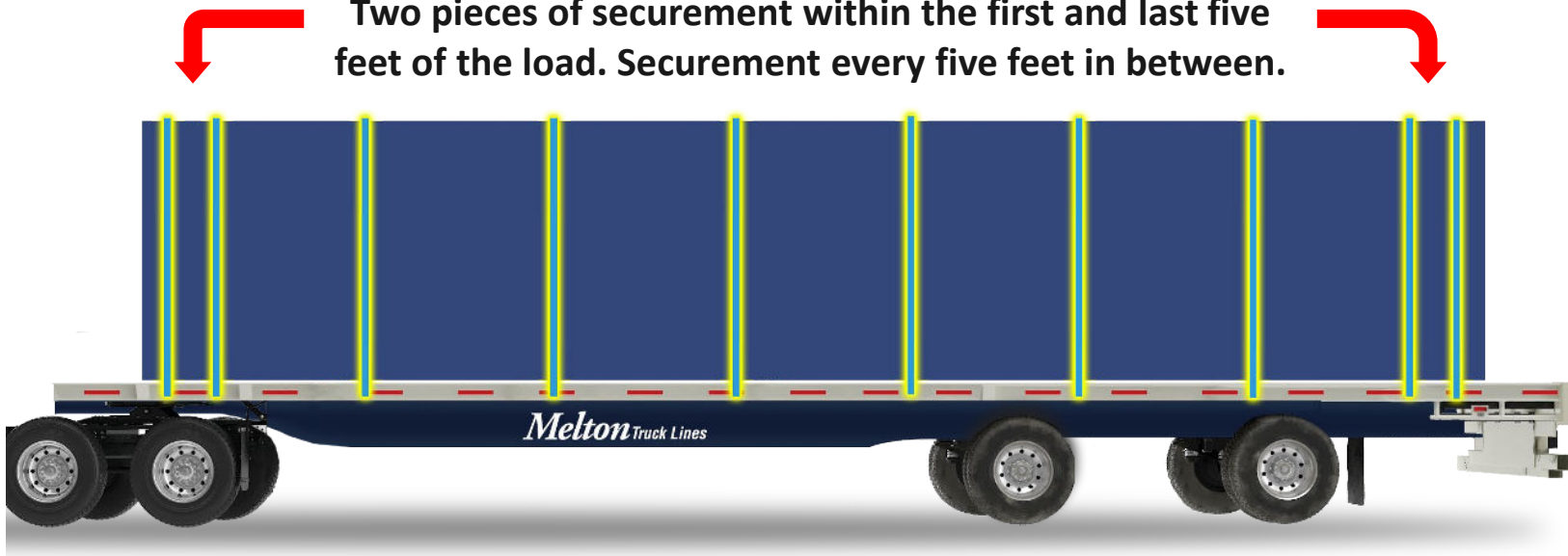
**Chains “teardrop” around
anchor points.
Hooks face up and out.**



SECUREMENT SPACING

The Five-Foot Rule (FMCSR 393.110):

Two pieces of securement within the first and last five feet of the load. Securement every five feet in between.



- Melton Truck Lines believes the safest practice is for securement to equal or exceed the weight of the load.
- This practice exceeds DOT standards and helps ensure our drivers see less scrutiny from the DOT.

ALTERNATING PULL

Failing to balance your securement will result in an unbalanced load.

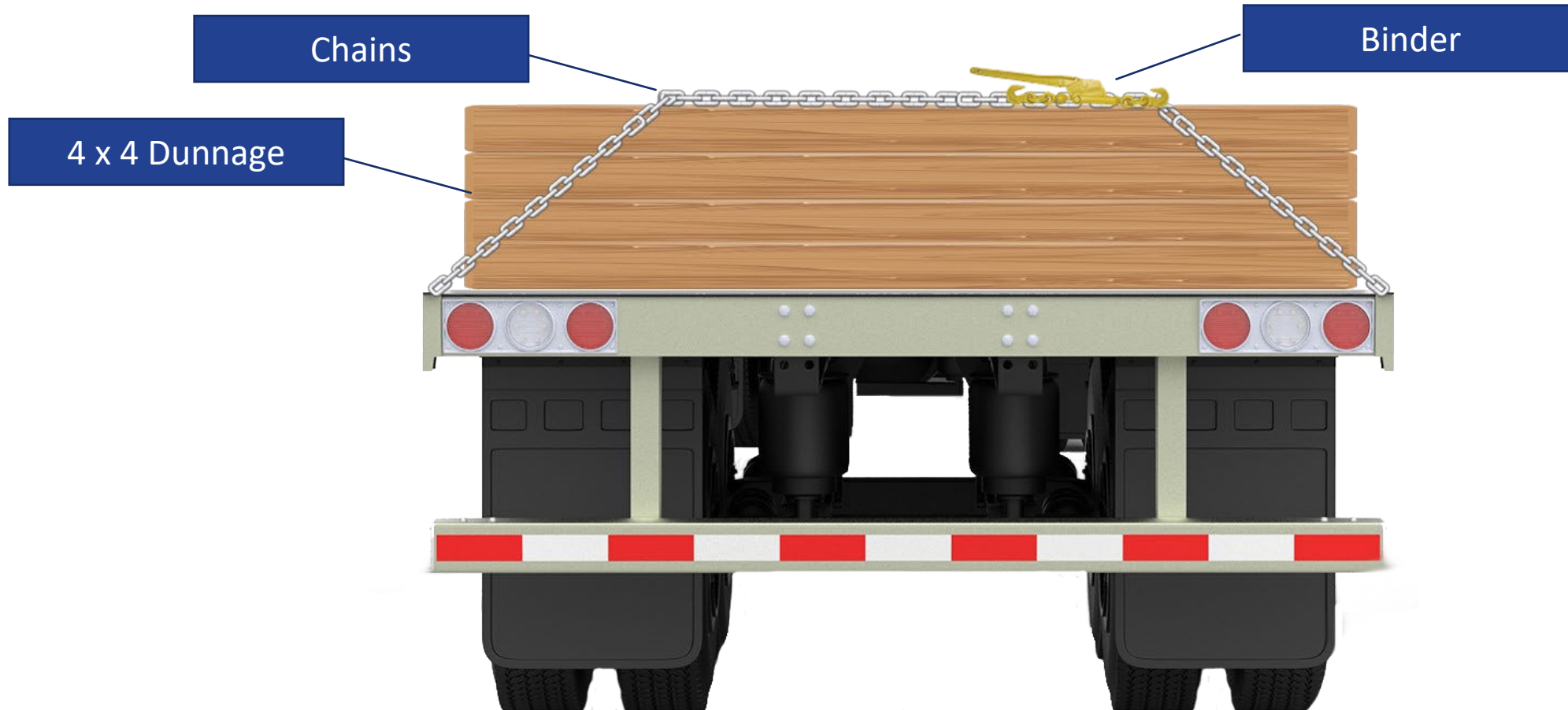


Alternate chain binders or strap winches to avoid shifting freight.



BULKHEADS

- 3 or 4 4x4 dunnage, stacked, chained down to the trailer and placed as close as possible in front of the load.
- Bulkheads are required in front of all multi-piece and multi-layer loads.
- Always add a bulkhead if space allows.

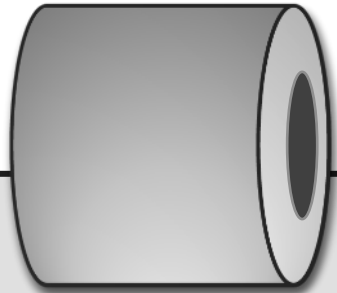


NO BULKHEAD + NO BELLY WRAP = A BAD DAY!

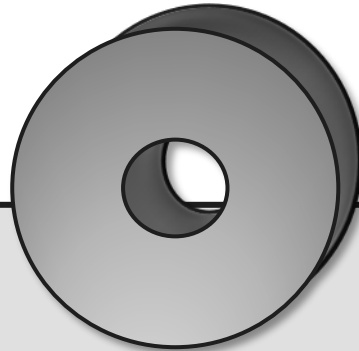


COIL TYPES

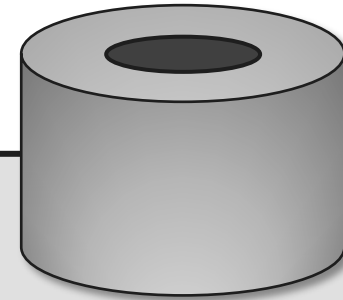
Shotgun
(eye lengthwise)



Suicide
(eye crosswise)

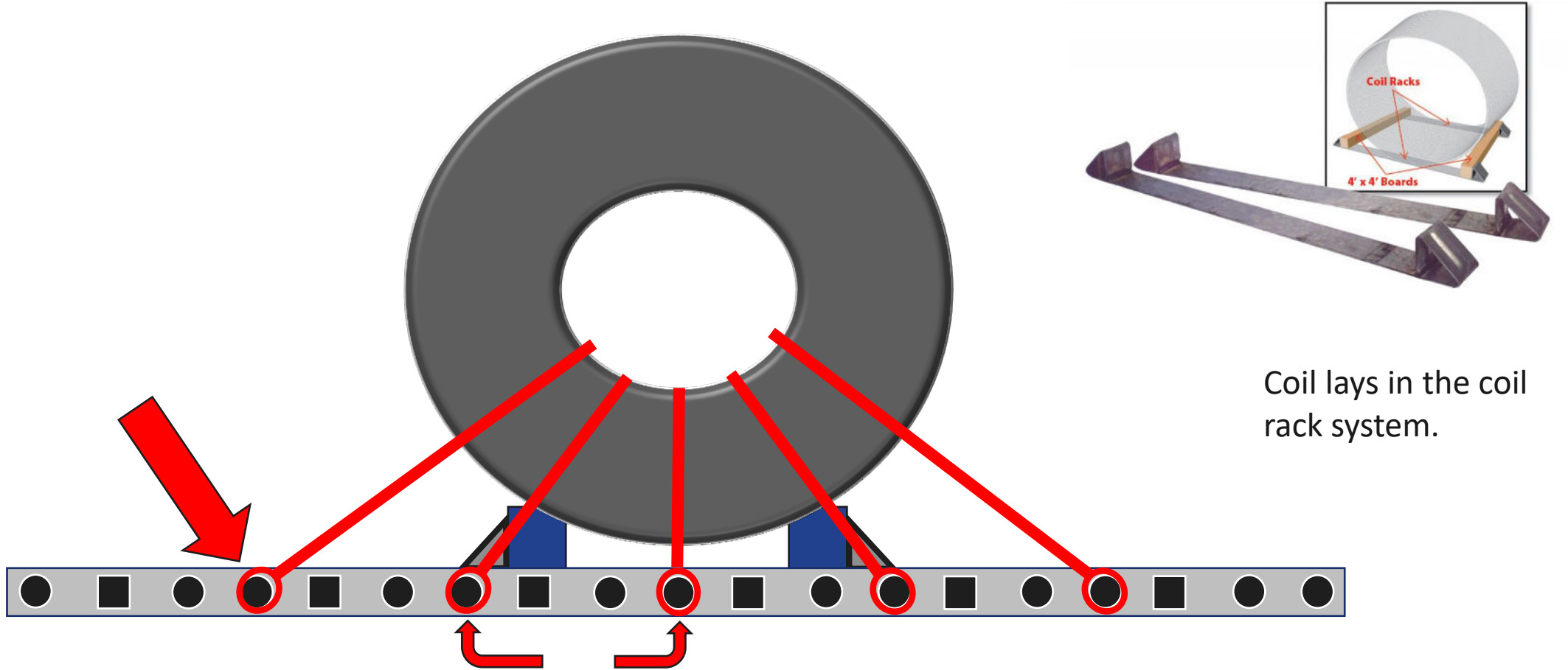


Eye to the Sky
(eye vertical)



The DOT regulations for metal coil securement can be found in the F.M.C.S.R (green book) under section 393.120.

COIL SECUREMENT - SUICIDE



- All Suicide Coils require five chains be placed at two-foot intervals.
- The chain should teardrop only a single tie-point.
- Binders should alternate side to side.
- Use metal edge protection.

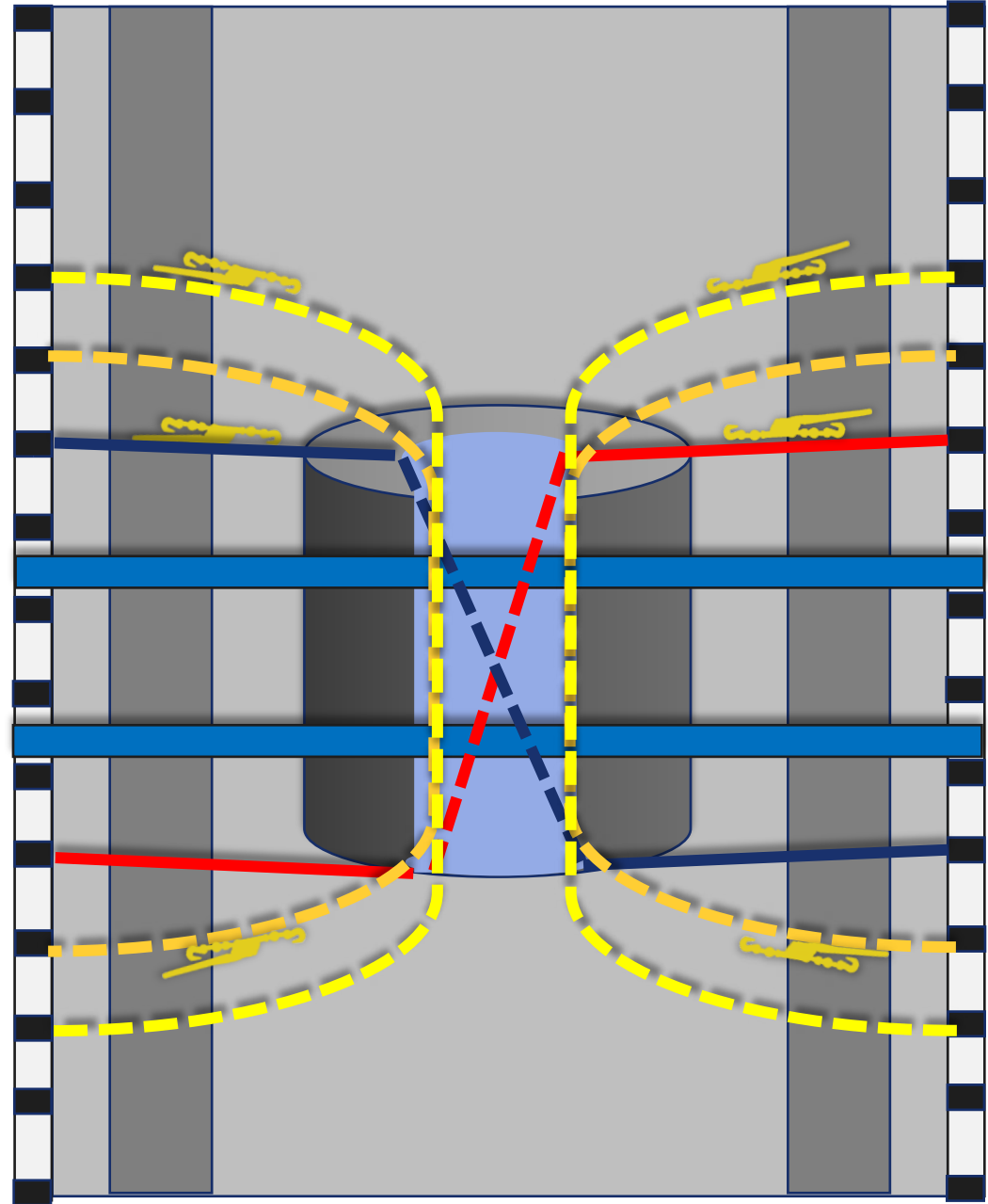
20,000 LBS COIL

The first five chains should spread 2' apart to provide balance and protection against rolling.



COIL SECUREMENT - SHOTGUN

- 1) Two straps over the top.
- 2) First two chains at placed as close to the face of the coil and cross inside the coil. *(Padding at the cross.)
- 3) All remaining chains “horse-shoe” through the coil and are placed on the first available tie-point (NO SPACING).
- 4) Shotgun Coils will always have an even number of chains.
- 5) Chain Binders will line up across the trailer from each other (mirror image).
- 6) Use edge protectors and padding between the chain and the coil.



SHOTGUN COIL SECUREMENT

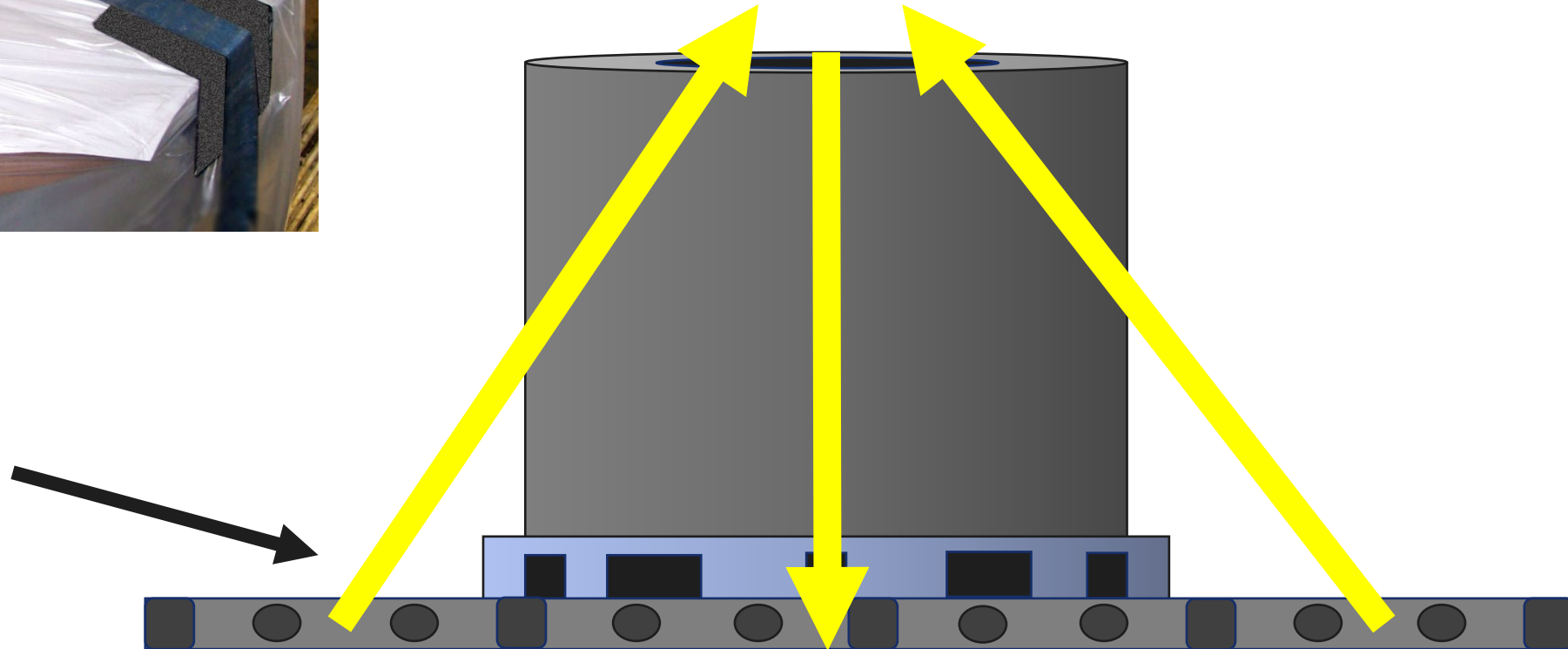


COIL SECUREMENT – EYE TO THE SKY



- **Friction material** should be placed under the corners of the pallet.
- Start with a **strap over the center** of the coil.
- Add straps that **cross over the center** of the eye. These straps should terminate at a point wider than the pallet.
- Trip straps must be placed front and back of pallet.

Note – Any strap that leaves the rub rail in an angle must be placed next to a spool to prevent damage.



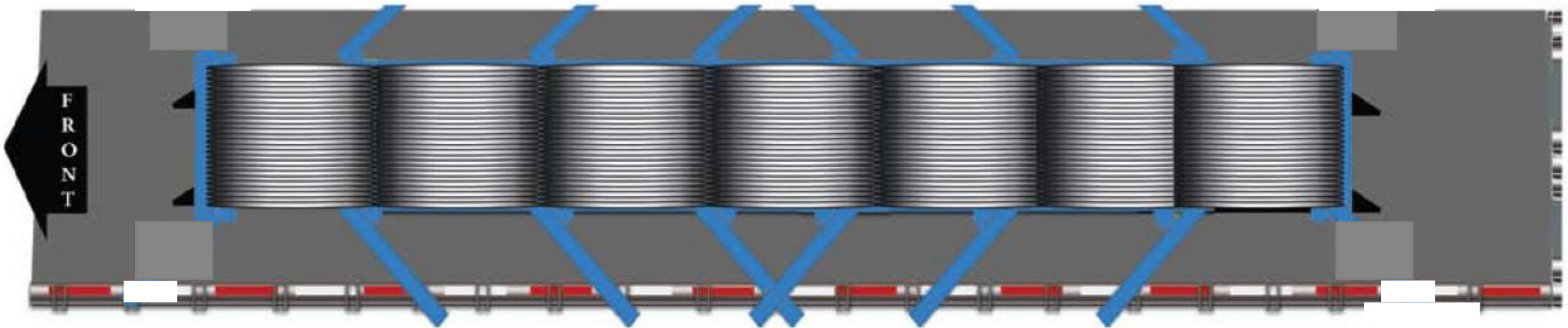
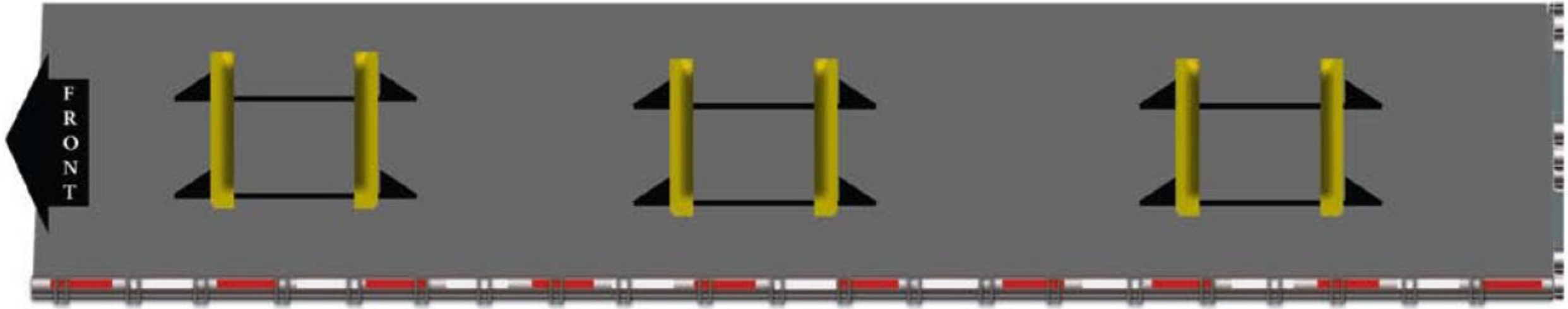


Well managed load. Just needs straps added front and rear to prevent sliding on steel coils.

CARGO)F1004545)DX-24A

SLINKYS

- Slinkys require coil racks and dunnage under the front, middle, and rear slinkys.
- The front and rear slinkys must have a center strap pulling straight down inside the eye.
- Front, middle, and rear slinkys all need a vertical wrap. Thread through the coil first then over the top and back through the eye so the straps cross inside the eye.
- Each pair of slinkys must have a butterfly wrap. All front pairs pull backward and all back pairs pull forward.



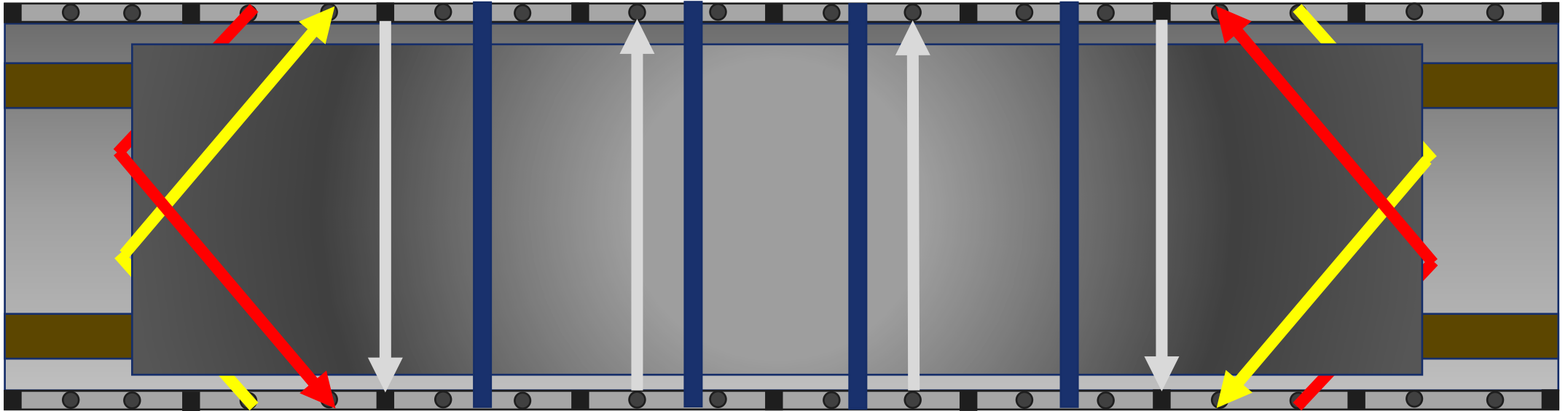
SUICIDE SLINKY SECUREMENT

Butterfly wrap pulling towards the center.



Vertical wrap pulling downward.

FLAT STEEL SECUREMENT



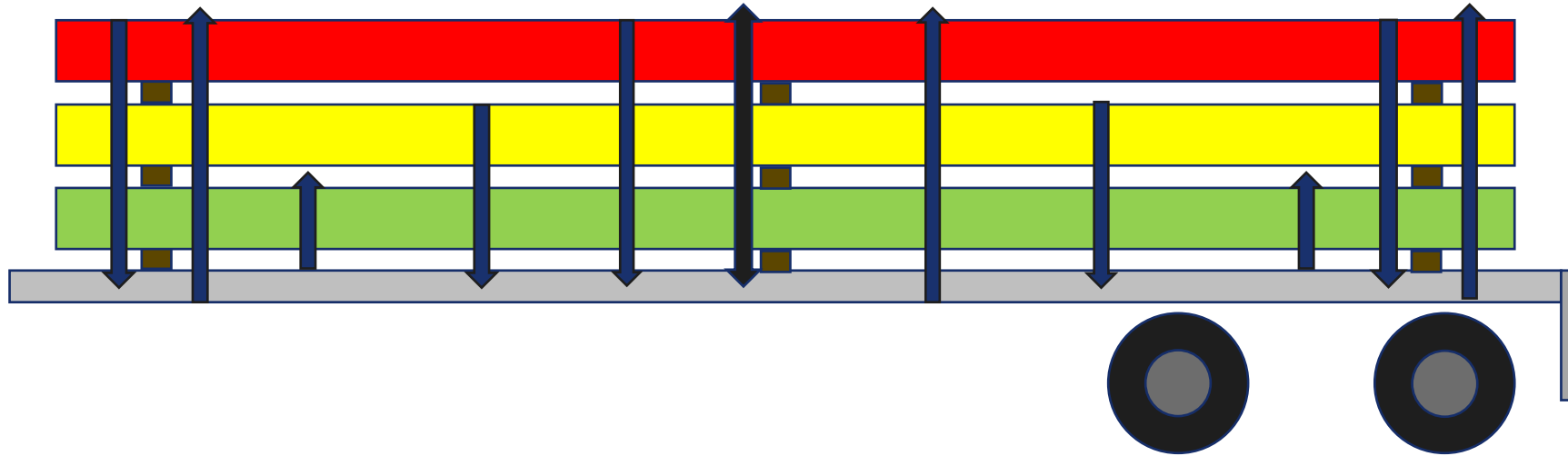
- Well padded chain over the plate.
- Well padded straps may also be used to supplement the chains.
- Cross-chain over the ends or tear drop over corners. **These should be tightened last.**

FLAT STEEL SECUREMENT



Flat steel is rarely simple or symmetrical. Proper planning, and working in from the ends, will help ensure the entire load remains stable.

MULTI LAYER SECUREMENT



- Layered securement is important for the **stability** of the load.
- Work your way up adding two straps to each layer. If needed, layers can be skipped, but **never skip the first layer**.
- Alternate your pull bottom to top, rather than front to back.
- Fill the gaps over the top to fulfill the “five-foot rule”. Always place a strap outside the width of the dunnage. Straps over lower layers count.
- Use a belly-wrap to control forward motion.

MULTI LAYER SECUREMENT



Find the mistakes.

MULTI LAYER SECUREMENT



- Not secured in layers. **Secure in layers!**
- Secure the heavy items, then secure the lighter, fragile items only to the top layer.

V-BOARDS

V-boards help spread the pressure of the strap over a wider area.

- V-boards help keep multi-piece loads together as a single unit.
- V-boards also help protect cargo from strap damage.
- V-boards are required for all soft, palletized, and multi-piece loads.
- Build V-boards by laying two 1" x 4" boards down. Spread them apart 3". Connect them by using pieces of an old strap.
- Secure the straps in place with nails or staples.

V-BOARDS



1" x 4" boards

Old strap
nailed/stapled to
boards

ROLLED FENCE/ROOFING/PALLETIZED MATERIALS



- V-Boards must be used on segmented products to capture the entire load and distribute the force of the strap across a greater span.
- Proper V-Boards should have no more than a 2-inch gap between the boards.
- The goal is for the strap to not contact the product where it runs over the corner.



A/C SECUREMENT

Melton transports many types of A/C units. Shippers may dictate securement that is contrary to Melton guidelines. Normally this is okay, but if you have questions or concerns please call Safety.



A/C SECUREMENT



Use extreme caution when tightening straps on A/C units. One more click on the winch may be the difference between a firm strap or damaged product.

When tightening your straps, decrease leverage by choking up on the winch bar. Placing your hand one foot out from the winch, rather than at the end of the bar, this will prevent over-tightening.

Consequences of improperly secured freight!



UNSECURED FREIGHT

- **DO NOT—DO NOT—DO NOT** move unsecured freight.
- Limited securement is acceptable for a yard move, but no securement is not an option.



LEGAL SECUREMENT DEVICES

- ALL dunnage and freight transported on the trailer, landing gear, or catwalk **MUST** be secured with a load rated securement device.
- Bungees are **NOT** securement devices.
- Tarps are **NOT** securement devices.



Hard Hats
Required

Melton

MELTON

MELTON

SECUREMENT RESOURCES

The Melton app's Safety menu contains several resources for drivers when it comes to securement help.

- Send photos to our Safety team using the 'Send Photos' option.
- Watch customer-specific securement videos using the 'Customer Videos' option.

