



GNCTR 2024 Crate Assistance Guideline

GNCTR 2024 Specifics

1. Crates are eligible to be received at the warehouse on January 16th, 2024, and can be stored up to a 1-month period up to February 13th, 2024. Teams are expected to coordinate their shipping to meet within these dates.
2. Warehouse Address:
 - Bob Ledrew & Sons Inc. Moving Services
 - 78 Glencoe Drive Mount Pearl, NL A1N 4S9
3. Crate specifications per the rulebook are: 8x4x6' & < 1500 lbs.
4. Max deduction penalty for not adhering to GNCTR 2024 crate specifications is 3 points from a team's overall score, applicable deductions are as follows:
 - 0.75 for non-compliance with the specified length dimension
 - 0.75 for non-compliance with the specified width dimension
 - 0.5 for non-compliance with the specified height dimension
 - 0.5 for non-compliance with the specified weight limit
 - 0.5 for incomplete, inaccurate, or late *No Surprise Crate Checklist form*
 - *2.0 for sending more than one (1) crate, even if crates are within specified dimensions. This would equate the deductions of non-compliant length, width & height crate dimensions.
5. The No Surprise Crate Checklist form is to be returned to VP Race Day, Alex Gibbons (raceday@gnctr2024.ca) by Friday, December 15th, 2023.
6. The organizing committee is exploring the possibility of a warehouse in Clarenville, NL for storing crates after race day instead of freighting crates back to St. John's, NL. If secured, teams will be expected to arrange pick up from Clarenville, NL. Confirmation to be provided no later than Friday, December 15th, 2023.

Preparing Your Crate to Ship:

1. It is recommended that every university and institution spray paint their team's name and city onto **ALL 4 SIDES AND THE TOP OF THE CRATE**.
2. Teams are advised to also spray paint **HEAVY END** onto the heaviest end of their crate as it will always fall forward. The heavy end must be close to the forklift. These markings should go on the **TOP** and **SIDE** of the heavy end of the crate.
3. Build your crate base so that a forklift can lift it from all four (4) sides, not just two (2), so that it can load/unload easier in every situation.
4. Install a ring on the front base in the event the crate needs to be pulled out of a truck.
5. **DO NOT ATTACH WHEELS** or casters under your crate. They cause safety problems on trucks and for the employees that will be handling the team's crates.



6. It is recommended that teams put things they don't want to travel with like helmets, boots, winter racewear, inside the crate. If teams' avail of this, nothing can be loose and all items within the crate must be tied down.
7. It is recommended that teams travel with tools to use to open and close their crate after the Tech-Ex and the Race Day. Other tools can be fastened down inside the crate in a toolbox if they are not required for opening and closing their crates.

Crate Dimensions:

1. Permitted Size/Weight: 8x4x6' high and < 1500 lbs. (includes the weight of the crate itself). Ensure dimensions are to the **OUTSIDE** of the crate and if extra reinforcement is required, it is applied only to the inside of the crate, never outside, as it adds extra width that can disrupt the loading of crates.
2. **Width:** If your team's crate is just one foot wider, at 8x5x6'H, in an 8' wide trailer, your crate will not fit beside another crate that's 8x4x6'H in the trailer, so instead of taking up 4' of trailer, your 8x5x6'H requires double the space and it would cost your team double what an 8x4x6'H costs to ship, because of the extra width of 1'.
3. **Length:** If a crate is too long, it takes up the space of what could have been another crate and therefore, it must be loaded straight. If trucks are 8' wide, any crate 9' or longer cannot be loaded horizontally, decreasing efficiencies and the crate is really difficult to load into a trailer lengthwise if a forklift's forks are only 4' long.
4. **Height:** Maintain height at 6'. Trucks can load 8' high crates but doors to typical Tech Ex Venues are traditionally only 6' high, so it is best practice to keep height to 6'.

Additional Information Supporting Ideal Crate Dimensions:

1. The cheapest size of crate, and easiest to load on and off any type of truck, any dock and any door opening at a Technical Exhibition Day venue is 8x4x6' high. Shipping is cheapest @ 8x4x6'H because two crates will fit beside each other inside an 8' trailer.
2. Tailgates on the rear of some trucks help lower freight to the ground, but they are only 8x4' and are useless with crates that are bigger than 8x4'. Larger crates are harder to unload/load.
3. Forklifts are not built to handle crates larger than 8x4".

Additional Tips for Construction of Crates:

1. **DO NOT** add last minute extra 2x4's attached outside your team's crate for additional reinforcement. If your crate requires additional reinforcement, install it to the inside. This disrupts loading/offloading of trucks if they are not built to the ideal size and this has been historically an issue shipping companies encounter.
2. It is recommended that teams use bolts or lots of thick screws in pre-drilled holes in the hardwood. Two wood screws at the bottom of an end are not sufficient.
3. Create smooth, safe, outside edges for better material handling.
4. Hinges provide easier access for opening your team's crate.

Visual Aids:



