

FAQ's

Frequently Asked Questions

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General Kit Basics

- The density Tiger Foam Fast Rise Foam is 1.75lb per cubic foot and Tiger Foam Slow Rise Foam is 2 lbs. per cubic foot.
- Tiger Foam 2 Component foams are rated at R-6 per inch (aged value) is one of the highest in the industry.
- The size of the kit, i.e. TF600 or TF200 is indicative of the board foot coverage or expanded yield for that kit. A TF600FR kit will cover approximately 600 square feet at 1" thick. A board foot as it relates to this product is a square foot one inch thick. The kit size is yield of the foam after foam has cured.
- Cubic Feet: Conversion to cubic foot yield for these kits is the TF200SR will fill 13 cubic feet and the TF600SR will fill 43 cubic feet. Filling liquid tanks, flotation devices, etc.: to convert gallons to cubic feet, multiply gallons X 0.1337 i.e. a 400 gallon tank would be $400 \times 0.1337 = 53.48$ cu. ft. To fill this tank you would need to use 1 TF600SR and 1 TF200SR.
- Tiger Foam contains NO Penta-BDEs as a fire retardant.

The 3 formulas available are:

1. E-84 Fire Rated: Formulated as a fast rise product with additional self extinguishing fire retardants.
2. Fast Rise Non Fire Rated: Formulated for surface spraying.
3. Slow Rise: Formulated for safely injecting into closed cavities.

Polyurethane foam can be used in outdoor conditions. Foam exposed to sunlight must be painted with any latex or elastomeric paint or other coating to protect it from UV light, which makes the foam turn bright yellow and brittle.

Optimal tank temperature of the kits is 75-85 degrees F. That means the metal tanks should be warm to the touch before and while you are spraying. If the tank temperature falls below 55 degrees F, they won't spray foam. The ambient temperature should be at least 50 degrees F or warmer. You can warm the tanks up by keeping them next to a heat source or in a warm place. You can also blow hot air from a forced air heater onto the tanks for a day or two prior to application. Be sure to closely monitor the temperature of the tanks when spraying in cold

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weather conditions. We suggest purchasing an infrared thermometer to be certain the tanks retain the optimal temperature during application. They are \$50 at Sears. If you are spending 4 figures on foam, the infrared thermometer may be a good investment to ensure you have the tanks at optimal temperature.

All of these kits come with extra tips. Tips should be changed every 8 minutes of spray time and if you stop spraying for more than 30 seconds. The reason for frequent tip changes is foam inside the nozzle tip will cure and harden and might compromise the ratio between the A and B tanks. The tips snap on and off easy. There are 10 tips with the TF600 and 8 tips with the TF200. You can order extra tips as a suggested item in the shopping cart when you order a kit. Generally, the tips included are all you need unless you anticipate stopping and starting often. These kits are very easy to use and effective if you just remember two things: Tank Temperature & Change Nozzle Tips! Our nozzle tips are very easy to clean if they are placed in acetone immediately after they are changed. If you wait too long to place tips in the acetone the foam will harden and tips will not clean well.

Yes, you can stop spraying and continue on another day. Once the kit has been opened you want to make sure you finish the kit within a few weeks time. You can store a partially used kit for up to 30 days with continued maintenance (see operating instructions). Just make sure to take off the old tip, put plenty of petroleum jelly over the prongs on the gun face (petroleum jelly included with kit) put the old tip back on until you are ready to use it again. When you are ready to start again, make sure the tanks are warmed, shake the tanks for a couple of minutes each, clean off excess petroleum jelly from gun, snap a new tip on, and start spraying again. To get the most out of your kits it is important to understand how the nozzle/gun delivery system works. You'll notice at the end of the gun, where the nozzle tip clips on, there are 2 small metal jets. This is where the two components come out of the gun and enter into the nozzle tip where they spin around in a vortex before they shoot out. The chemicals mix here to make the foam. The trigger on the gun is metered. This means the further you pull back on the trigger, the faster the foam comes out. These kits, especially the larger ones, are under high pressure. When you first start spraying the kit you don't want to jerk back on the trigger. Slowly increase your pull on the trigger to get the gun primed and the foam flowing through the tip, so the product mixes well. If not done correctly you might end up spraying 'flat' foam. When this happens the foam doesn't expand well and the yields are less. You really don't need to pull the trigger back any more than a quarter of the way for best control, at least until you get below half a tank. Then you'll have to pull back further on the trigger to get the same flow rate since there will be less propellant left. To put an inch on, you'll just pull back a quarter of the way on the trigger and move your arm at a pretty good speed to get a $\frac{3}{4}$ " application of foam. **$\frac{3}{4}$ " of wet foam will cure to 1" of cured foam.**

We take pride in our products and only offer the best in the industry. Technical support is available 7 days a week at 1-800-664.0063.

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Important steps to remember

Your application will go well if you remember these 5 simple things:

1. The tank temperature needs to be optimally between 75 degrees F and 85 degrees F. A good rule of thumb is if the metal tank is warm to the touch, you are good to go.
2. Rock the tanks for a few minutes or so before you start spraying to mix the propellant well. Otherwise, you'll leave about 5% in the bottom of the tanks. If you rock the tanks before you start, they'll empty completely.
3. Change your tips every 8 minutes of continuous spray time and if you stop spraying for more than 30 seconds. The frequent tip changes are because over time you will get a slight build up of cured foam in the tip. This build up of foam might make you get off ratio between the tanks. We give you extra tips with each kit for this purpose. Use them and your application will go well.
4. Start out slow and gradual with the trigger when you first start spraying. This will prime the gun and create smooth flow and good mixing in the nozzle.
5. Cover up. Spray foam is extremely adhesive and will stick to everything. Nothing will remove it...it has to wear off. When spraying there may be a fine mist of back-spray. This is why it is important to always wear PPE (Personal Protective Equipment): gloves, goggles, respirator, and a Tyvek suit.

If we may be of further service, please don't hesitate to give us a call. We have thousands of satisfied customers all around the globe and are always available to answer your questions.

When to use and how to calculate the Slow Rise formula

(Note: This is a narrative overview of product applications by product formula.

Please read entire narrative for the product you are considering. Gaining a general overview of the product's strengths and limitations will help you make an informed decision regarding your application).

Framed Houses and Structures: The wall is intact with no insulation and you want to leave the wall intact.

Closed Wall Cavities: Slow Rise (SR) Formula

Tiger Foam's Slow Rise (SR) formula is low-expansion foam that is made to expand slowly and fill existing plastered or drywall covered walls completely without the risk of creating too much pressure and blowing the drywall halfway across the room! This product is especially suited to insulating homes that were built without insulation in the outside walls or as a soundproofing for common walls in condominiums, apartments, and to isolate family rooms, bathrooms, laundry rooms from excess noise.

Common uses:

- The common wall between apartments and condos for sound control
- Soundproofing offices and conference rooms

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- The common wall between an unheated garage and the main house for thermal insulation. (Also good for soundproofing if it sounds like someone is landing a 747 in your kitchen every time someone pulls the car into the garage!)
- To insulate outside walls on older homes that lack insulation in the exterior walls.
- Boat hulls, pontoons and flotation devices. The SR product is approved as flotation foam by the U.S. Coast Guard.
- Anywhere injected foam can be used.

Calculating how much you need of Slow Rise Foam:

Tiger Foam Slow Rise Formula

- Measure Length x Height of the wall to be filled
- Subtract the square feet of doors and windows in that wall
- Subtract 6% for the studs (which you won't be spraying)
- Take that total and multiply by 3.5" for a 2"x 4" wall, or 5.5" if it is a 2"x 6" wall
- The result is the number of board feet you need to install to complete your project.

Example:

- 10' long x 8' tall wall is 80 square feet
- It has one door 3' x 7' (21 sq. ft.) and 2 windows 2.5' x 3' x 2 (15 sq. ft.). for a total of 36 sq. ft.
- Take the 80 sq. ft. and subtract the 36 sq. ft. and you are left with 44 sq. ft.
- Take the 44 sq. ft. and subtract 6% ($44 \times .06 = 2.64$) which is rounded to 2.6 sq. ft. and you are left with 41.4 sq. ft.
- The 2"x 4" cavity is really 3.5" deep. You multiply $41.4 \times 3.5 = 149.9$ board feet to insulate.
- You would need to order a 200SR kit to insulate this wall

The price of the kits are less expensive the more you buy. A 600 board foot kit is almost the same price as 2 of the 200s, so buying a large 600 kit is 30% free product over buying 2 of the 200 bd. ft. kits.

A simple way to figure how much you will need of the Slow Rise Foam is that the TF600SR kit will cover approximately 148sqft of wall at a 3.5" stud depth. If the wall is a 4" depth the kits will cover approximately 129sqft of wall and if a 5.5" wall approximately 94sqft.

Pontoons:

Your average 16 foot pontoon set requires a 600SR and a 200SR to fill both pontoons. The calculation for filling a cylinder is:

- $\pi r^2 L$
- $3.14 = \pi$ (π)
- r^2 (r = radius, which is half the diameter) r^2 means the radius is squared (you multiply the radius by itself)
- L = length of the pontoon

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Example

The pontoon is 18" in diameter and 16ft long

- $\pi r^2 \times L$
- The radius is 9" or .75' $.75 \times .75 = 0.5625$
- $3.14 \times 0.5625 = 1.76625$
- $1.76625 \times 16' = 28.26 \times 2(\text{for both pontoons}) = 56.52$ cubic feet in both pontoons.
- One TF600SR (43 cubic feet) and one TF200FR (13 cubic feet) will do the application

Installation of the Slow Rise Foam

The installation of the Slow Rise foam is done on a timed basis. Speak with our Sales or Technical Teams to help figure out how to approach your specific application.

When to use and how to calculate the Fast Rise formula

Framed Houses and Structures: New construction, open wall cavities, use Fast Rise Formula Figuring how much you need depends on your application. Let's take a common application whereby you are building a new house or have stripped the drywall or plaster and lathe off the walls in a remodel job. Commonly, you will want to apply 1" of foam to the interior of the outside walls and add a batt to fill in the rest of the cavity. You can also solely use the foam to achieve the desired R value.

Calculating how much you need:

- Measure your outside walls length x height to get your raw square feet of wall area
- Measure the doors and windows and get the total square feet of door and window area
- Subtract window and door area from the total wall area
- Subtract 10% from this figure to account for stud space

Example:

A house that measures 40'x 20' with 8' walls:

- $40L + 20W \times 2 = 120 \times 8' = 960$ total square feet of wall area in the outside walls
- You have 120 square feet of windows and doors area
- $960 - 120 = 840$ square feet of wall
- Subtract 6% (for stud space) of 840, which is rounded to 50 sq. ft. $840 - 50 = 790$ square feet of wall area
- You have a total of 790 square feet of wall area to foam
- This job would require one TF600FR kit and one TF200FR kit for a 1" application

Crawl spaces

Crawl spaces and basement ceilings, including rim joists are calculated at simple board footage. For instance, if your crawlspace is 20'x 30', that equals 600 sq. ft. One TF600FR kit will do that

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job and you'll have warm floors and less or no draftiness from air infiltration coming up the walls from the crawlspace or basement.

Metal buildings

Metal buildings are figured on gross sq. footage of wall and ceilings or roof.

Example:

A 20 x 30 metal building with 10 foot walls:

- $30L + 20W \times 2 = 100 \times 10'$ wall height = 1000 total square feet of wall area
- You have 145 square feet of window and door area
- $1000 - 145 = 855$ square feet of wall
- The gable is 2' above the wall to the peak $2' \times 20 = 40$ square feet of gable. This gets added to the wall square feet. $855 + 40 = 895$
- The roof is $11' \times 30' \times 2 = 660$ square feet of roof area
- $895 + 660 = 1555$ square feet
- Add 10% to account for the corrugations in the metal. $1555 \times .10 = 155.5$
- $1555 + 155.5 = 1710.5$ total square feet
- Three of the TF600FR kits will do the application

Spas and Hot Tubs

Foam is sprayed directly to the hot tub and plumbing usually at a 3" application.

Filling Liquid Tanks

Slow Rise foam is used to fill buried gas and oil tanks, flotation devices, etc. To convert gallons to cubic feet, multiply gallons X 0.1337 i.e. a 400 gallon tank would be $400 \times 0.1337 = 53.48$ cu. ft. to fill this tank (or very close to it) you would need to use the Slow Rise (SR) formula. A TF600SR will Fill 43 cu. ft. and a TF200SR 13 cubic feet for a total of 56 cu. ft. yield, you would have a bit left over.

55 gallon drums commonly used to make floating platforms requires 7.53 cu. ft. of foam to fill.

A TF600SR kit is 43 cubic feet, and will fill 5.5 - 55 gallon drums

A TF200SR kit is 13 cubic feet, and will fill 1.7 - 55-gallon drums

For different size drums or tanks: 1 gallon = approximately 0.1337 cubic feet.

If it is below 65 degrees outside where you live, you really need to put a heat source on these tanks to get the full yield. A ceramic heater or electric heater with a fan works well. The warmer they are, the better the yield. If you don't keep the tanks warm, you will not get the yield out of the kits and will run out of foam. Maximum yield is achieved when tanks are between 75 and 85 degrees. If you are doing a large project, it would pay to invest in a infrared thermometer for \$50 at Sears or Home Depot. If a TF600 gets below 60 degrees, you can lose 30% of the yield, so the thermometer would be a good investment. If the tank temperature gets below 55 degrees F, the foam doesn't expand and will run.

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We recommend that you leave them in the house or a heated space. Many folks don't realize that if its cold weather and you keep your house temperature at 68 to 70 degrees F, then the tank temperature is only going to be about 61 degrees if you set it on the floor in the house.

BEST BET: Put a heat source on these kits before you use them and remember they need to be warm to the touch to get the full yield. In the summer, put them in the sun for a couple of hours then rock the tanks for a couple minutes or so to distribute the propellant and the heat evenly. This foam expands and adheres great within its proscribed temperature ranges.

KEY WORDS: TANKS WARM TO THE TOUCH! Pre-warm the kits 1-2 days prior to your application to ensure the core temperature of the tanks are within range. They also take time to cool down. You don't have to keep heat on them while you are spraying. Just get them warm before you start. Unless it's below 20 degrees outside, they won't cool down in the time it takes to spray a kit. A little common sense when using these kits really makes them work well.

Do not subject them to an open flame to warm them up. Never use a blowtorch to warm the tanks up! (Sorry, that was a real question called into us, so we thought we'd address it before it was asked again)

These kits are a dream to use in the summer, but they do take special attention to tank temperatures in the winter months. We appreciate you taking the time to understand this.

Call Toll Free: 800-664-0063

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