

**ROSCO**  
**SUBFLOOR**  
 Wave Lock™ Technology

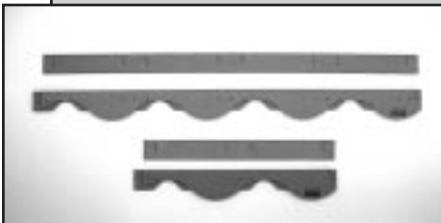
**COMPONENTS**

**Panels**



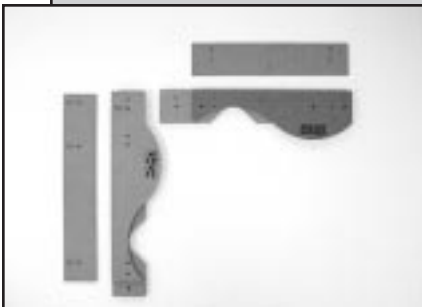
Rosco SubFloor panels, the basic component for the system, are 42" x 42" (3'6" x 3'6"), precisely machined so they interlock seamlessly with our unique Wave Lock Technology.  
 No. #300 08000 4242

**Perimeters**



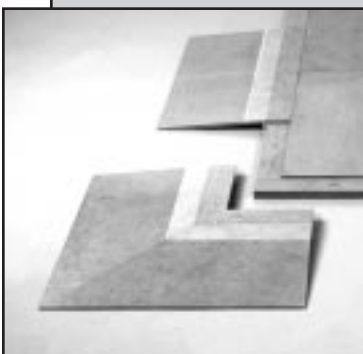
Perimeters consist of two parts, a base piece and a removable cap. The perimeters bolt together to border the edges of the panels. Perimeters are 4 7/8" wide. Long Perimeters are 7' in length and include nine #20 1" x 1/4" screws. No. #300 08010 0084. Short Perimeters are 3'6" in length and include five #20 1" x 1/4" screws. No. #300 08010 0042

**Corners**



Corners consist of two base pieces and two caps. A base piece and a removable cap 21" x 4 7/8". These are joined at a 90° angle to a 25 1/2" 4 7/8" x 2" unit which encapsulates the corner of a Rosco SubFloor Panel. Includes seven #20 1" x 1/4" screws.  
 No. #300 08015 0000

**Ramps**



Used where ramps are required to replace the top part of a Short Perimeter. The flat part is 4 7/8" wide x 42" long. The angled portion slopes at a 1:12 pitch over 18" and the bottom 1/2" is beveled at a 45° angle.  
 Standard Ramp  
 No. #300 08020 0000  
 Corner Ramp  
 No. #300 08021 0000

**The Rosco SubFloor**

The Rosco SubFloor system has been precision machined to fit perfectly and remain dimensionally stable. All panels and matching perimeter components are interchangeable and slip together easily.

You can install the Rosco SubFloor over any existing floor for short or long term use, and then easily remove it if your requirements change. The Rosco SubFloor was engineered with performers to achieve the proper balance of support and "spring". The pads are spaced to allow maximum bounce and minimum rebound while distributing weight properly to assure a consistent structure.

The total height of the floor is 2 inches. It can be installed wall to wall, or it can be installed in just a portion of a room (with ramps for access).

The Rosco SubFloor consists of universal interlocking 42" x 42" (3'6" x 3'6") modular subfloor panels, perimeter components (corners, and 3'6" and 7'0" edges). Transition ramps are available for installations that require them. The perimeter components serve to hold the panels together and keep all the panels attached to the base floor. The perimeter pieces consist of a base (blocking) and a cap. The base supports the edges of floor panels around the perimeter of the room and the cap clamps the panels down and brings the perimeter pieces level with the top surface of the floor.

Please note that Rosco SubFloor should be installed to meet all local building codes. The panels, with pads attached, are 2" tall and care should be taken during installation to provide a safe transition to avoid tripping hazards. Rosco Transition Ramps are ADA (Americans with Disabilities Act) compliant and provide an elegant transition from building floor or stage deck to the Rosco SubFloor.

**Rosco SubFloor Installation Kits:**

There are three installation kits to choose from depending on your needs and the type of base floor to which you will be installing your Rosco SubFloor.

1. To attach to a **concrete or masonry floor** use Rosco's Concrete Floor Installation Kit, No. #300 08041 OKIT.
2. To attach to a **wood floor** use Rosco's Wood Floor Installation Kit, No. #300 08042 OKIT.
3. To install (without attaching) to an existing floor, use Rosco's Semi-Permanent Installation Kit, No. #300 08040 OKIT.

Each Installation Kit includes 10' x 100' (1000 sq. ft.) of 6 mil polyethylene to provide a vapor barrier, 2 rolls of Rosco clear vinyl tape (for installation of the vapor barrier), and the appropriate screws or tape for attaching your Rosco SubFloor perimeter to the existing floor.

# Step-By-Step Instructions

## 1. Be sure you have enough panels.

Rosco SubFloor panels are 3' 6" x 3' 6" (42" square = 12¼ sq. ft.). Perimeter pieces measure 4¾" wide. To be sure you have enough panels for your space, take the dimensions of each side of your room **in inches**, subtract 10" (allows a perimeter gap of ¼" plus a minimum 1" space for installing final row) and divide by 42. This will give you the maximum number of whole panels that will fit for each side. Thus, to equip a room 30' x 15' you would do the following:

$$30' \times 12 = 360" \qquad 360" - 10" = 350" \qquad 350" \div 42 = 8.3$$

Thus 8 panels will fit lengthwise.

$$15' \times 12 = 180 \qquad 180" - 10" = 170" \qquad 170" \div 42 = 4.05$$

Thus 4 panels will fit the width.

Now multiply the length by width for the total number of panels needed.

$$8 \times 4 = 32$$

Thus our example room will require 32 panels giving an exact dimension of 28' 8¾" (8 panels with perimeter) by 14' 8¾" (4 panels with perimeter). **Note: In a standard configuration with perimeters on both sides the length or width of Rosco SubFloor will always be X' 8¾" when an even number of panels is used, and (X + 1)' 2¾" when an odd number of panels are used. With X' representing the length or width in feet taken from the total number of panels used.** See next page for wall to wall installations.

For most rectangular rooms it's best to pick two adjoining walls to start the building process. This will mean that you only need to customize two sides for a wall to wall fit or for the use of transition ramps. For rooms that do not have two adjoining walls that are 90° to one another, you should center the floor by finding the orientation that allows the most full panels to be used. If you will not be filling the entire room, decide where the floor will be laid out.



## 2. Install Vapor Barrier.

The Installation Kits available for your Rosco SubFloor includes a Vapor Barrier. This is simply 6 mil polyethylene sheeting, 10' wide x 100' long. It is used to provide a vapor barrier beneath your Rosco SubFloor.

The polyethylene sheeting should be laid out so as to cover the whole surface to be covered with Rosco SubFloor. Where the floor is wider than 10' you will need to overlap two pieces of 6 mil poly, allowing at least a 6" overlap. The 6 mil poly should be taped to the floor and any joints or overlaps should also be taped. Two rolls of Rosco Clear Vinyl Tape are included in the Installation Kit for that purpose.



## 3. Installing perimeter system components.

If possible, use a chalk line (tricky over poly, so this can also be done prior to installing vapor barrier) or other means to lay out a straight line as a guide.

If possible, you should leave a ¼" to ½" gap between the Rosco SubFloor and the wall. Using the longest dimension of the floor, lay out the first row of the perimeter bases (with the caps removed) end to end (brand side up). Each perimeter base half laps with the next. Install #20 1" x ¼" Phillips head screw at each half lap to join the perimeter bases. Start with a corner piece and continue with long perimeter pieces, using one short perimeter piece if needed.

For installation over existing wood floor the Rosco SubFloor Wood Permanent Installation Kit provides 2 ½" wood screws. For installation over concrete or masonry floor the Rosco SubFloor Concrete Permanent Installation Kit provides 2 ¾" concrete screws. If you cannot drill or screw into existing floor or you do not want to, use the Rosco SubFloor Semi-permanent Installation Kit which provides double stick tape to secure perimeter pieces to the existing floor.



#### 4. Use the template provided to attach foam pads.

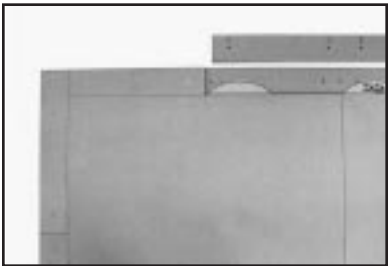
The foam pads, which are critical to the success of the Rosco SubFloor, can be quickly, easily and accurately secured by using the template provided with the panels. Lay floor panels upside down (brand side down) and place the template on top. Peel adhesive backing off each pad and place foam pad in each opening. (Make sure the surface of the panel is clean to assure good adherence.) There are 12 pads for each panel. **Note: Shipments requiring 20 panels or less will have the foam pads already attached. Rosco will attach the pads for any size order, however, for orders over 20 panels your shipping cost will double when panels are shipped with the pads attached.**



#### 5. Lay first row of panels.

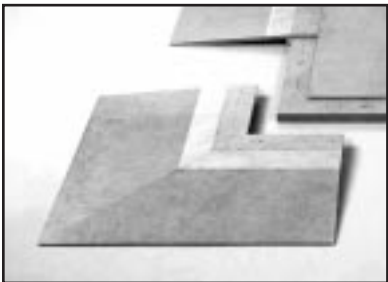
Start by matching Wave Lock edges of panels to perimeter (brand side up) and push tight. Lay out each succeeding panel, interlocking with the adjoining panel. The surface of the panel is machined square and designed to fit together exactly. Make sure to keep panel corners aligned and fitted snugly. **Correcting alignment later is difficult.**

Panels slide into each other at a 45° angle, and can be used in any orientation. The panels should slide together easily no excessive force should be required. Do not hit side of panels with a hammer. If additional pressure is needed to fit panels, use a rubber mallet, or similar tools to move panel into place. Typically if panels do not join together with ease, it is due to one of the panels lying lower than the other and can be remedied by slightly lifting the offending panel.



#### 6. Attach perimeter top.

When all panels are in place, use #20 1" x 1/4" screws provided to attach perimeter tops to bases. Tops are modular and can bridge panel joints or in the case of locating ramps align or bridge panel joints.



#### 7. Ramps

If ramps are needed, they can be used to replace short top perimeter pieces. Rosco SubFloor should be installed to meet all local building codes, and ramps should be used as needed to provide safe transitions.



#### 8. Wall-To-Wall installation

More than likely a whole number of panels with a full perimeter won't fit into the available space exactly. The Rosco SubFloor system is designed to easily overcome these situations. **Note: Typically wall to wall installations require basic carpentry skills such as being able to use a skill or table saw and a hand drill. If you are not comfortable with these tools, you should have this portion of the job done by someone who is.**

Suppose the space available is 31' x 15'. Using the formula from page 2, take the dimensions of each side of the space in inches, subtract 10" (allows a perimeter gap of 1/4" to a 1") and divide by 42. This will give you the number of panels that will fit. A room that is 31' x 15' will take 8 panels (28' 8 3/4" including perimeter) by 4 panels (14' 8 3/4" including perimeter).

$31' \times 12 = 372" - 10 = 362 \div 42 = 8.6$  Eight panels = 28' (3.5 x 8 = 28) plus 8 3/4" (for both perimeters at 4 3/8" x 2 = 8 3/4") leaves 27 3/4" of uncovered floor

$15' \times 12 = 180" - 10 = 170 \div 42 = 4.05$  Four panels = 14' + 8 3/4" (perimeters) will leave 3 3/4" of excess.

You should always start with the dimension that leaves you with the smallest gap, as in the case of our example the 15' wall only has a 3/4" of uncovered space. There are two ways to resolve this:

- a) The first is to center the floor between the 15' width leaving an 1 1/2" gap either side of the floor, covering the gaps with a wide lip cove molding.
- b) The second choice is to leave a 1/4" gap on one side, leaving a 3" gap on the opposite side. Using two of the Rosco Custom Top Perimeters in the 1' x 7' size (No. 300 08030 2484) cut the width of the custom top perimeters down to 7 1/8". (This number is derived by adding 3" opening - 1/4" gap plus the 4 3/8" width of the perimeter base.) Now the two 7 1/8" x 7' x 1/2" pieces will replace all the caps along this wall reducing the 3" opening down to an acceptable 1/4" gap. **Note: Any gap wider than 3" should have support on both sides, such as a two by four used opposite of the perimeter base (see photo shown for step 8).**

On the second dimension (31') you are left with 27 3/4" of excess, because your uncovered area is wider than 20" you need to fill in on both wall if using Rosco Custom Top Perimeter. You will need to obtain 62 linear feet of true 1 1/2" thick material such as two by two or two by four. In the case of our 31' example you would need 31 feet of two by four or 31 linear feet of two by two (example a) or 62 linear feet of two by two (example b). If using a 1/2" material purchased locally for custom top perimeter see example c.

- a) The first option is to leave the largest area to be semi sprung next to the mirror wall. Starting at the mirror wall leave a 1/4" gap between the two by four perimeter and the wall, laying the two by four on the four inch (nominal 3 1/2") edge. The two by fours may be attached using the same method as the perimeter base (wood screws, concrete screws, or double stick tape). Using four Rosco Custom Top Perimeters at the 2' x 7' to span from the two by four to the perimeter base. This leaves you with the starting side 19 5/8" (19 1/8" with the gap) away from the wall to the edge of a base perimeter. **Note: Rosco recommends the widest unsupported gap for our 1/2" MDF to cover be no greater than 16 1/2".**

This leaves the finish side of the far panel 7 3/8" (7 1/8" including your 1/4" gap) away from the opposite wall (preferably a barre wall). Use the same method to secure the two by two as used on the perimeter base, making sure to leave your 1/4" gap. Remove the perimeter caps and replace them with four Rosco 1' x 7' Custom Top Perimeters (No. #300 08030 1284) trimmed down to 7 3/8" that span between the two by two and the perimeter base.

- b) Similar to the above you could center your Rosco SubFloor. Thus leaving 13 5/8" on either side (13 1/8" with a 1/4" gap) of the perimeter bases. Using eight Rosco 2' x 7' Custom Top Perimeters (No. #300 08030 2484) trimmed down to 18" to extend from the perimeter base to the two by two perimeter at the wall.

- c) You may choose to cover the gap between the wall and the perimeter base with a 1/2" material purchased on your own, such as a 1/2" plywood. In the case of our 31' x 15' example you could use the factory caps on one side of the 31' perimeter, leaving the perimeter a 1/4" away from the wall. Thus you could cover 27 1/2" on the opposite side with a 1/2" material purchased at your local lumber supply store. **Note: Follow manufacturer's recommended maximum unsupported distance for 1/2" material being used.**

#### Accessory Parts for Rosco SubFloor

- Ramp: 3'6" x 25 1/2" (replaces one short perimeter piece)
- Corner Transition Ramp: 25 1/2" (replaces both corner caps)
- Custom Top Perimeter A Long 6" x 7'  
Designed for installation situation where a gap of 1 1/2" to 3" needs to be covered.  
Top perimeter piece can cantilever up to 1 1/2".
- Custom Top Perimeter A Short 6" x 3'6"  
Designed for installation situation where a gap of 1 1/2" to 3" needs to be covered.  
Top perimeter piece can cantilever up to 1 1/2".
- Custom Top Perimeter B Long 2' x 7'  
Designed for installation where a gap of 3" to 19 1/2" needs to be covered.  
Top perimeter B piece needs to be supported with a 2 x 4 or equivalent on <16 1/2" centers.
- Custom Top Perimeter B Short 2' x 3'6"  
Designed for installation where a gap of 3" to 19 1/2" needs to be covered.  
Top perimeter B piece needs to be supported with a 2 x 4 or equivalent on <16 1/2" centers.

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