



# Installation Manual

**Note:** This is not meant to be an all-inclusive installation manual. The purpose of this document is to provide an overview on how to install and assemble your SkyFloor® Modular Glass Deck System.

## **Assembly overview:**

Your SkyFloor® Modular Glass Deck system comes as a knockdown assembly. When assembling framing members be careful not to scratch or chip parts. Place protective layer (cardboard, etc.) on the working surface prior to starting assembly. Assembling your SkyFloor® Modular Glass Deck system is a simple process that only requires a few hand tools.

- Screw gun
- Caulk gun
- Suction cup(s) - Available at [www.glassflooringsystems.com/products/suction-cups](http://www.glassflooringsystems.com/products/suction-cups)
- Blue painter's tape
- Troweling tool
- Glass cleaner and paper towels
- Disposable gloves
- Protective layer (cardboard, etc.)
- Tape measure
- 5/16 drill bit
- Countersink drill bit

## **What's Included:**

- Perimeter frame
- Crossbeams framing (if a multi panel system)
- 1/4-20 SS screws
- Setting gasket
- Structural glass
- Dow Corning 995 silicone
- Backer rod

## **Limitation of Liability:**

Glass Flooring Systems presumes no liability for damages caused by:

- Failure to follow instructions
- Use of irrelevant materials
- Improper usage of units or parts
- Modifications of any sort
- Errors made by installers
- Insufficient structural framing

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## Site/Opening Preparation

Your Glass Flooring Systems Modular Glass Deck System is non-structural and designed to mount on top of existing structural framing. There are a few important points to consider when completing the opening.

1. Our perimeter framing is 1.6875 inches tall. You want the top of our perimeter framing to be flush with your finished deck surface. Refer to product drawings for details.
2. Opening needs to be square.
3. All structural support framing needs to be on one plane so there is even support over the entire system.
4. Support under perimeter framing needs to be between 1.25” and 2”. Refer to product drawings for details.
5. Support under crossbeam needs to be between 1.5” and 3.5”. Refer to product drawings for details.

## Waterproofing – Optional

### **If you are waterproofing your deck you MUST read this before beginning installation**

Once perimeter framing is installed apply Trex RainEscape butyl tape around the perimeter frame. This is a three step process. First step is to adhere Trex RainEscape butyl tape on the flat surface around the whole perimeter of frame. See image 1. The second step is to apply the Trex RainEscape butyl tape half on the flat and half up the side of the perimeter framing. The tape should end about 1/8 from the top of the perimeter frame. See image 2. The third step is to apply a section of Trex RainEscape butyl tape at each of the four corners of the perimeter frame. See Image 3. The corner piece is one solid piece stretched to fit over the outside corner. Ensure all tape is fully adhered and no bubbles are present.

**\*\*\* Water test to verify waterproofing was completed properly must be completed prior to installing deck boards.\*\*\***

Once waterproofing is installed and a successful water test has been completed proceed to Step 3 of this manual.

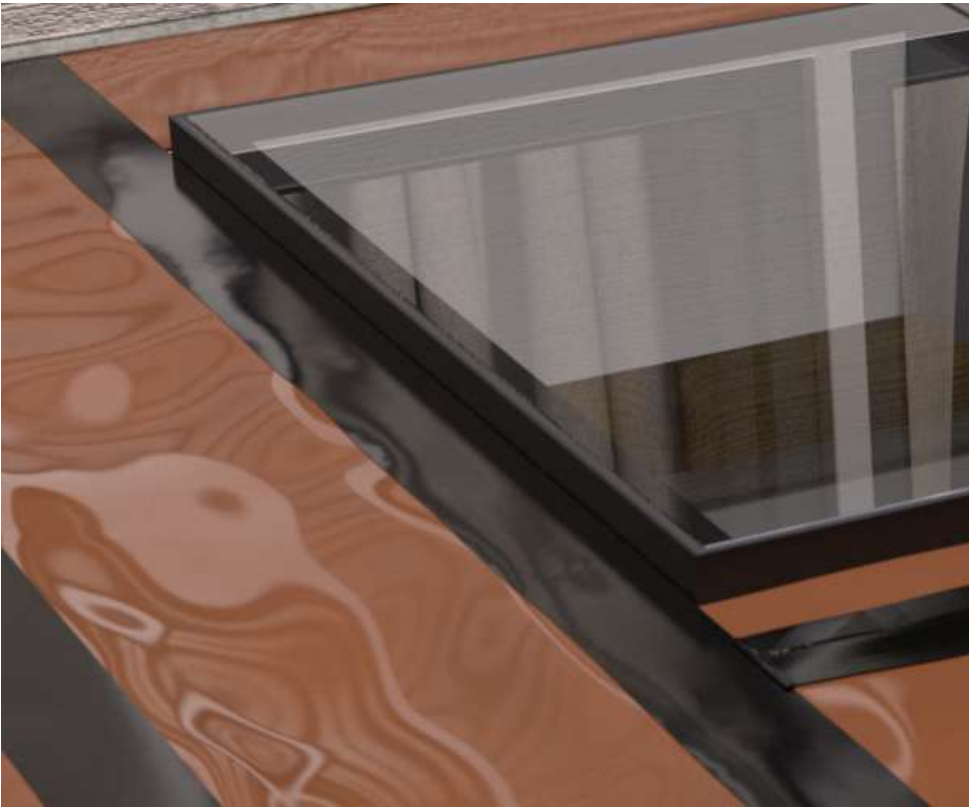


Image 1 – First pass with Trex RainEscape butyl tape

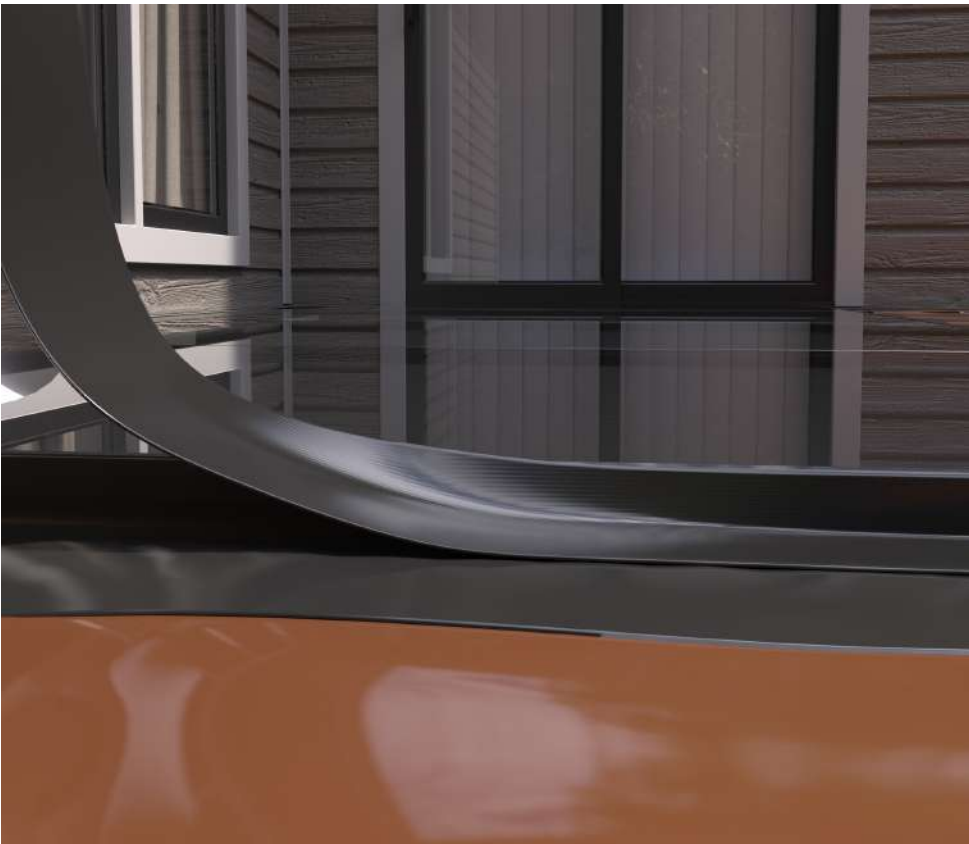


Image 2 - Second Pass with Trex RainEscape butyl tape

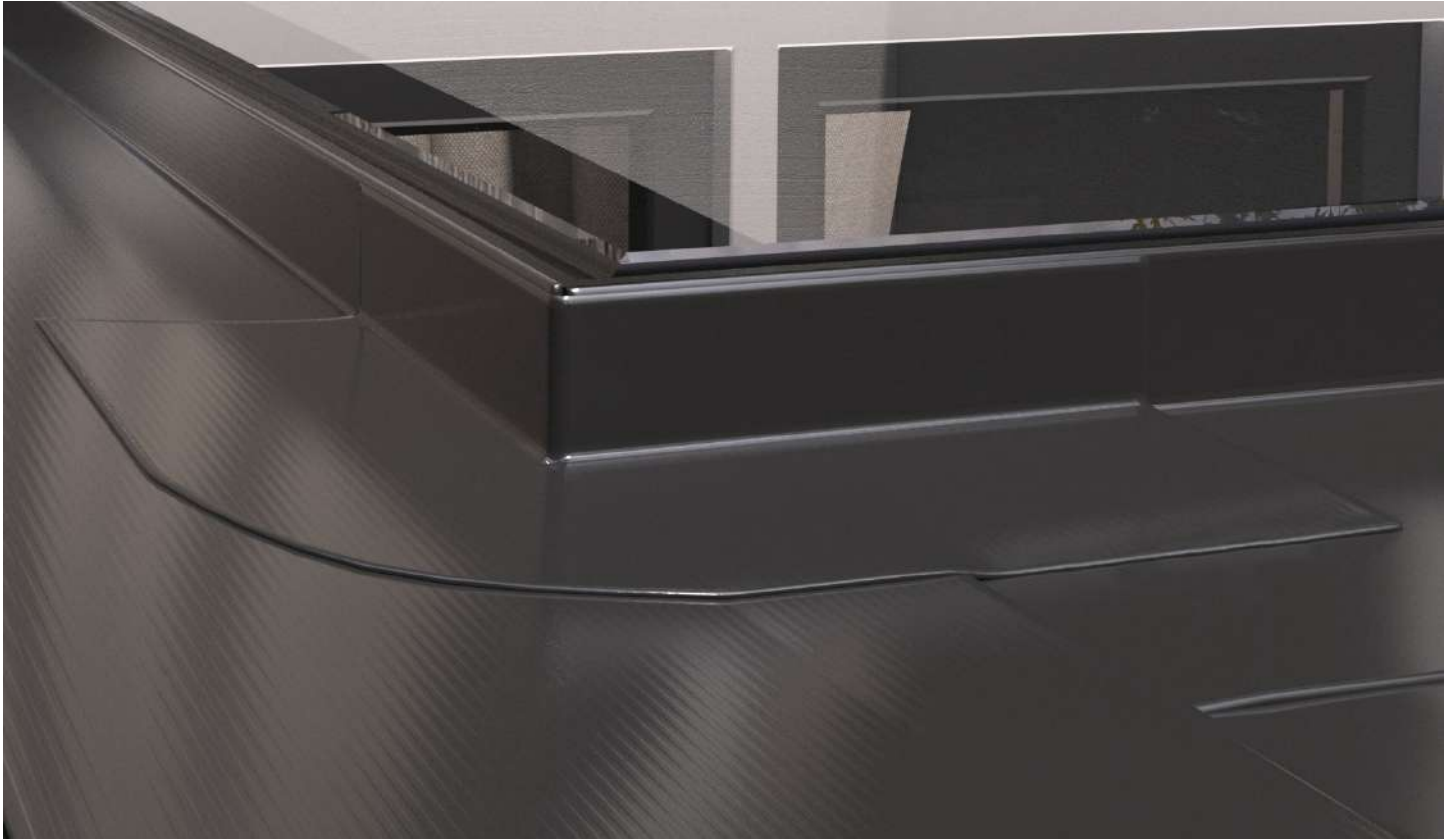


Image 3 – Corner with Trex RainEscape butyl tape

**\*\*\* Water test to verify waterproofing was completed properly must be completed prior to installing deck boards.\*\*\***

## Step 1: Perimeter

Verify opening is correct size and meets support criteria outlined in “Site/Opening Preparation” shown above.

Lay your SkyFloor® Modular Glass Deck framing members on top of the structural framing members which have been previously installed (by others). Align the mitered corners together. Our perimeter framing requires a minimum of 1.25” of structural framing support. Once framing is in place mark locations of holes required for mounting screws. Holes (5/16) should be approximately 2-3 inches from each corner and then spaced out approximately every 16-20 inches. Run countersink bit over holes to allow for screws to sit flush with framing member.

## Step 2: Secure framing members in place and silicone corners

Once the mounting holes are drilled, the perimeter members are correctly aligned and you have confirmed the framing is square, it’s time to secure them into place using the stainless steel screws provided. Prior to securing in place all of the corners need to have silicone applied. See Images 4,5,6 and 7. Once adequate silicone has been applied you can now secure perimeter framing in place.

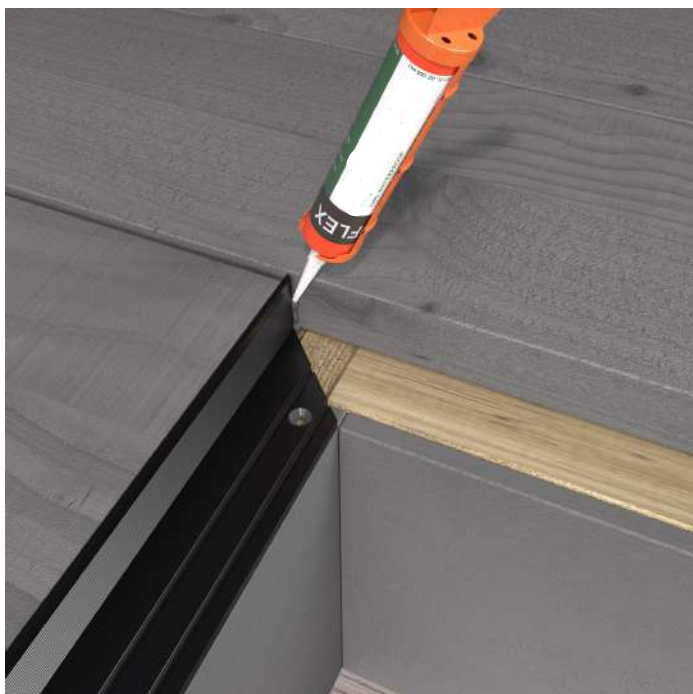


Image 4



Image 5



Image 6



Image 7



### Step 3: Crossbeams (if required)

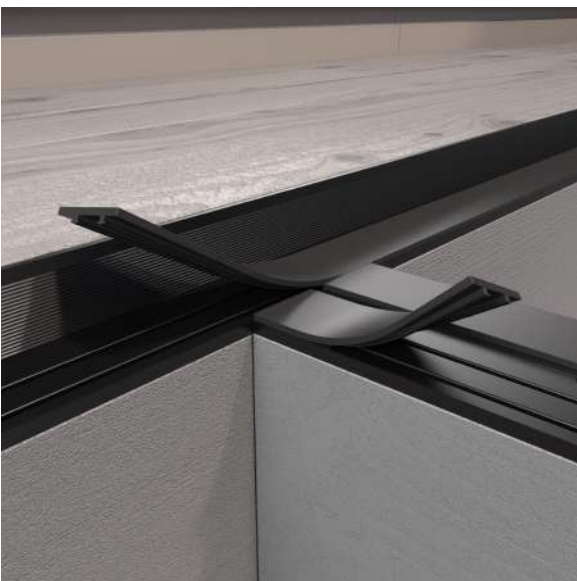
A.) Now that your perimeter has been secured in place you need to install the flat crossbeams. If your unit does not have a crossbeam you can skip this step and go to Step 4, installing the setting gasket. Crossbeam members require a minimum of 1 ½” support at center of mullion.



B.) To install the flat crossbeam plate simply place over the structural rafter and align the flat plate between the two perimeter framing members and secure with stainless steel screws provided.

### Step 5: Install the setting gasket

The setting gasket included with your panels works for both the perimeter and for the crossbeams (if required). It is critical that the setting gaskets are fully snapped in place before setting the glass panels. Apply pressure with thumb to get gasket to seat in channel. Critical for gasket to be fully set in channel.





## Step 6: Set the glass panel

**Edges and corners are the most vulnerable to damage proceed with extreme care when setting glass panels. It is highly recommended to use something as a spacer for protection between frame and glass panels and between each glass panel when setting glass.**

Install a spacer or bumper along the perimeter frame prior to setting first panel. This is strictly for protecting glass in case the glass panel comes in contact with frame when setting the panel in place. Once panel is set remove spacer/bumper. If you have a multi-panel unit the glass panels are universal and can be set in any location. Position each glass panel with approximately 3/8" gap between the glass panel and the perimeter frame as well as between each glass panel if you have a multi-panel unit. Using a vacuum cup to assist in setting the glass panel(s) is highly recommended.



## Step 7A: Caulking – Tape the glass and frame

Prior to applying silicone, you must first mask off the perimeter framing members and glass panel edges. Blue painter's tape is recommended. This step will assist in keeping the silicone off the frame and glass. The tape will also give you a clean consistent finished edge once removed.



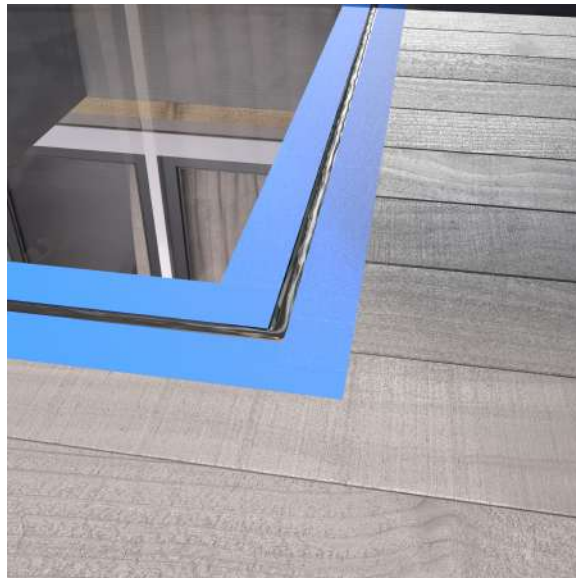
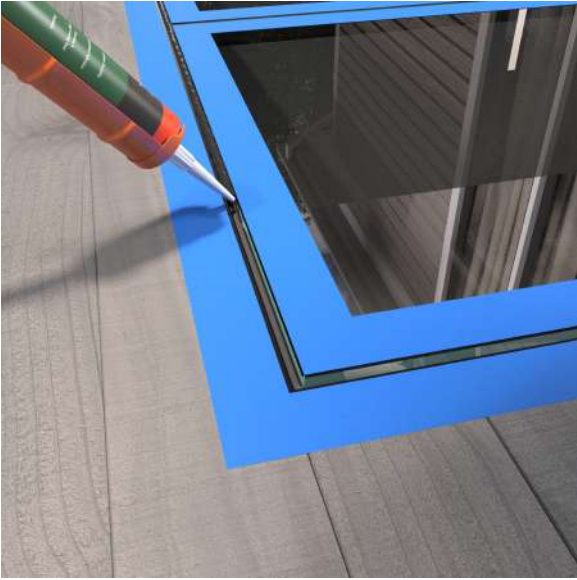
### **Step 7B: Silicone – Apply backer rod**

The backer rod is to be installed once the glass panels are set in their final resting place. The backer rod should be inserted into the gap between the glass panel and the frame. If your system has more than one glass panel, insert the backer rod between each glass panel. The backer rod should be pushed down into the cavity so that only the top 10mm glass panel is showing and this space is to be filled with Dow Corning 995 silicone.



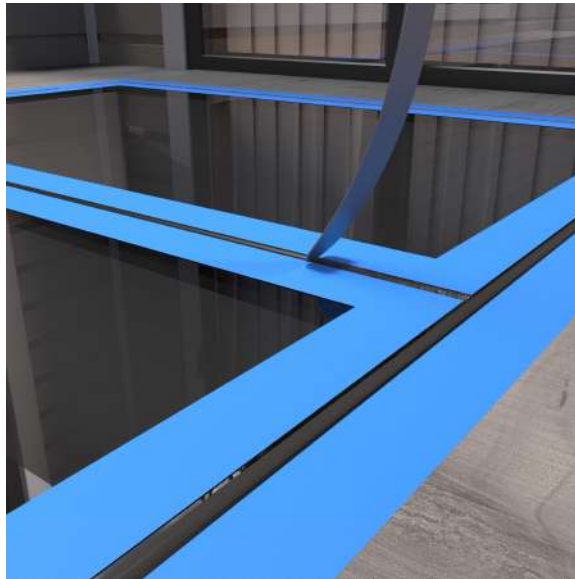
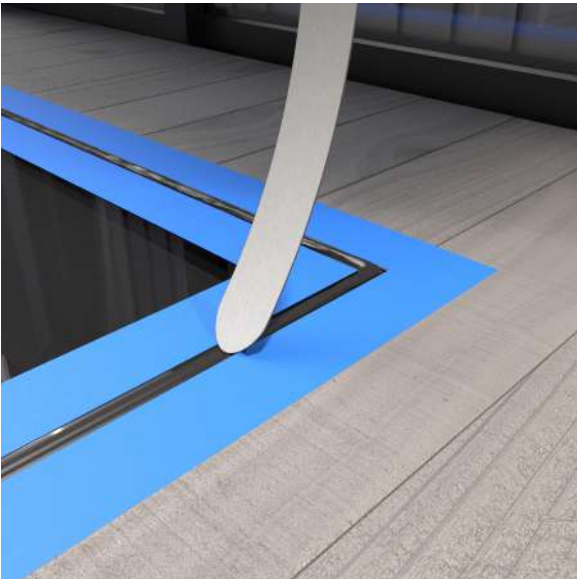
### **Step 7C: Caulking - Fill cavity with silicone**

Now that the backer rod is in place and you have masked off the perimeter frame and glass panels you are now ready to bond the glass panels in place.



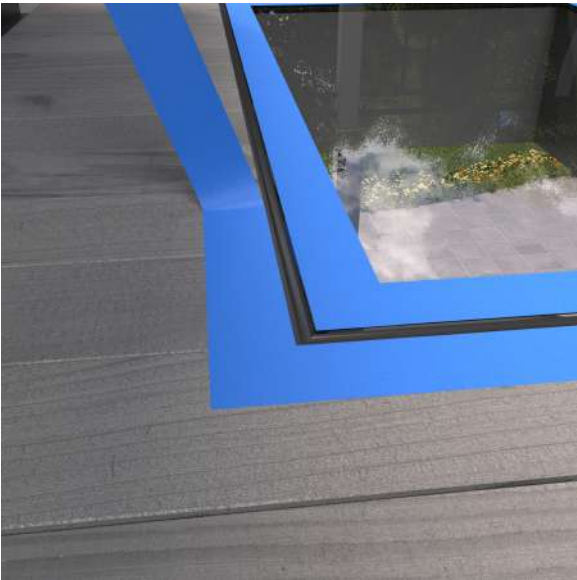
### Step 7D: Caulking - Smooth out the silicone

Once the cavity is filled with silicone, it is now time to smooth out the silicone with a troweling tool. When smoothing out the silicone joint keep trowel at an angle. You may have to make a couple of passes to remove all excess silicone. This step must be completed within 15 minutes of applying the silicone. If you exceed the 15 minutes the silicone will begin to change consistency and it will become difficult to get a smooth consistent finish.



### Step 8: Remove the tape

Simply peel up tape as soon as you have completed troweling off the excess silicone. Do not allow silicone to cure. When removing tape be careful not to get silicone on the glass or surrounding areas. Silicone can be problematic to remove from certain surfaces. Wear disposable gloves when removing tape and have garbage can or bag near by to put tape into as soon as it is removed.



### **Step 9: Smooth out the silicone using Windex**

Once tape has been removed spray silicone joint with windex and run your index finger gently over the silicone joint to smooth out any minor imperfections there may be that were left behind from the troweling process or from removing the tape. The windex creates a barrier between your finger and the silicone and prevents the silicone sticking to your finger as you smooth out any minor imperfections. Allow the windex to air dry. **DO NOT** try and dry the windex from the silicone joint.



### **Step 10: Wait for the silicone to cure**

The new silicon joint should be protected from debris and interfering elements (dust, leaves dirt etc..) for 24-36 hours. The silicone joint will develop a skin within this time frame and should be protected from any debris, dust etc. during this period. Avoid all contact with the silicone joint while it is curing. Curing time varies depending on environmental conditions (temp, sunlight, humidity etc.) but typically takes 7-14 days to cure. Prior to this 7-14 days you should avoid ALL contact with silicone joint.

If you have any questions please call one of our product specialist at 862-701-5320

