



## POINTERS ON RETAPING YOUR DOME

---

Your Growing Spaces dome will thrive best when maintained on an annual basis. Retaping should be done when temperatures are above 50° Fahrenheit, and there is no condensation or wind, preferably mid-day in most climates.

### **NEWER (1 - 5 YEARS) DOME MAINTENANCE:**

Daily temperature fluctuations can force the screws to “back out” of the glazing, causing the tape above it to pucker and if neglected long enough may puncture the tape. In either case, it is best to cut a small X into the tape over the screw, and then reach through the X with your driver bit and tighten the screw. Clean the area with a wet rag of isopropyl alcohol. Then cut a 1” x 1” square of tape and place over the cut X in the tape. Firmly secure it to the dome using a roller or burnisher. This should be done every spring.

### **OLDER (APPROX. 5 YEARS) DOME MAINTENANCE:**

Most of the work in retaping can be performed from ladders, but to do the very top of the dome, it is sometimes necessary to climb on the dome structure. If your dome has been leaking for a long time and you are in any way doubtful about the integrity of the struts, it is highly advisable to prop up your hubs from inside the dome in the area that you are working. If the struts have maintained their structural integrity, there should be no problem climbing on the dome. Make sure that your weight is over the struts and not in the middle of a glazing triangle. Some dome owners prefer to have bare feet when climbing around on the dome as it affords a better grip. (Be aware that ladders and shoes can scratch the polycarbonate panels.)

Look for screws that have “backed out” as mentioned above. Also, check for screws that may have loosened in their holes and replace them with square drive stainless steel screws an inch above or below the existing screws. Clean with alcohol and retape the spot with a piece of 1” x 1” tape. Firmly secure it to the dome using a roller or burnisher.

With older domes, the golden Phillips head deck screws can rust and snap due to stress. Replace the deck screws with square drive stainless steel screws whenever possible. Be sure to drive them into new sites an inch above or below the previous screw sites. Again, clean with alcohol and retape the spot with a piece of 1” x 1” tape, then firmly secure it to the dome using a roller or burnisher.

With severely neglected domes and domes over ten years old, water damage may occur to the wood struts sufficiently so that the screws no longer “bite” into the wood. You would notice this by discoloration (gray to black areas) of the wood. You may also find loose screws in the general tightening process that “just don’t tighten”. In either case, re-attach with a new square drive stainless steel screw into the glazing an inch above or below the existing screw. Clean the area with isopropyl alcohol and patch it with a 1” x 1” piece of tape, then use a roller or burnisher to firmly secure it to the dome. In cases where the newer screws don’t “bite”, use a screw 1” longer.

Occasionally, one side of the tape may curl or separate from the glazing. Sometimes this happens near a screw and water enters into the dome through the screw hole. To remedy this problem, you can cut and apply a thin strip of tape (cut to 1" wide) over the curled edge, extending it beyond the area of the leak an inch or so.

Excessive curling, especially if both sides of the tape curl, is an indication that it may be time to replace an entire strip of tape. Remove the portion, or entire strip depending on the severity of the problem. Then, tighten all exposed screws. Clean the taping area with soap and water and follow with a dampened rag of isopropyl alcohol. Retape the area preferably with tape about ½" wider than the older tape. Firmly secure with a roller or burnisher when taping is complete.

Ultraviolet light can eventually cause the tape to become brittle and crack or tear along the middle seam between the glazing sections. Usually the south side of the dome shows this symptom first. Replacing the damaged tape is the only solution here and how much to replace is the only question. A rule of thumb is that if cracking is occurring along a seam; replace most, if not all of it, as the rest will probably crack in a year or so. Pull off as much of the old tape as possible, including the smallest pieces! Tighten or replace the exposed screws, then clean the taped area with soap and water and wipe with a rag dampened with isopropyl alcohol. Retape with tape preferably ½" wider than the older tape. Work from the bottom upward, overlapping the hub areas, and then secure the tape with a roller or burnisher.