

# Assembly Instructions for a Large Star Cluster (Item #2252)

There are multiple approaches to assembling your cluster, and no single technique is “right” or “wrong”. Outlined here is the approach that several artisans have expressed proved the simplest for them.

Note: all steps are illustrated here using only the cardboard template to provide the clearest images possible.

**Step 1:** From the included packet of templates, select a single sheet. Using a hobby knife or shears, carefully separate a single 3-sided pyramid form.

**Step 2:** Fold along the perforations carefully, tucking narrow tab inside pyramid and secure with tape.

**Step 3:** Clean and foil all bevel pieces.

**Step 4:** Assemble a bevel pyramid using the cardboard template to ensure angles are consistent. Tack solder securely.

**Step 5:** Remove pyramid from cardboard form, solder inside of bevel pyramid, then outside.

**Step 6:** Repeat steps 4 and 5 until all bevels are used (this should result in 20 bevel pyramids).

**Step 7:** Position 5 pyramids on their side (open bases facing inward) to form a ring. Note: the interior of the ring is defined as a pentagon shape, each corner formed by the joining of 2 pyramids should be 72 degrees. Once pieces are aligned, tack solder corners together.

**Step 8:** Repeat step 7 to form a second ring of 5 pyramids.

**Step 9:** Invert one of the rings just formed and stack on top of the other, alternating points to allow pieces to interlock. Once aligned correctly, tack solder to secure and set aside.

**Step 10:** Position 5 pyramids to form a crown by aligning pyramids with the open bases facing upward, and 2 edges of each pyramid being completely parallel to the edges of their neighboring pyramids. Once pieces are positioned, tack solder to secure.

**Step 11:** Repeat step 10 to form a second crown using the last 5 pyramids.

**Step 12:** You should now have 3 tack soldered segments which will be joined to form your 3D star. Before proceeding, place a crown on the center ring and check alignment. Make any adjustments to your tack soldered pieces as needed. Carefully flip the ring over, and check the fit of the other crown, again, making any adjustments to your tack soldering as needed.

**Step 13:** Solder the inside and outside seams of all 3 segments, being carefully to only lightly tin the edges that will be joined. Clean all pieces thoroughly with flux remover/neutralizer and water, and allow to dry completely before proceeding.

**Step 14:** Position a crown on the center ring, apply a minimal amount of flux and solder segments together.

**Step 15:** Flip joined crown and center over and join the second crown as the first.

**Step 16:** Clean thoroughly with flux remover/neutralizer and a damp cloth.  
Note: do not submerge your finished 3D project to avoid trapping moisture inside.

