

# ESR pre-shaping procedure

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## Procedure preparing steps:

**Step 1.** Make sure that APE ( appropriate protective material) is used. For pre-shaping procedure only rubber gloves is required.

**Step 2.** Make sure that working area is clean.

**Step 3.** Prepare pre-shape assembly. Clean all surfaces and contacts with ESR material with isopropil alcohol. See pic.1



*Pic 1. Assembly preparing*

**Step 4.** Make sure oven is empty and clean for procedure to continue. See pic.2

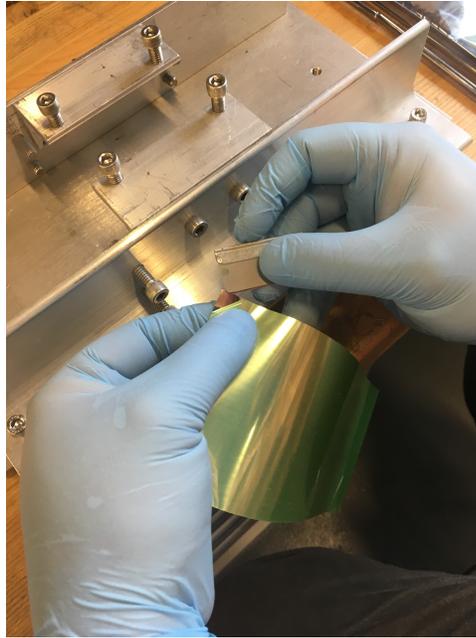


*Pic 2. Oven overlook*

**Assembly steps:**

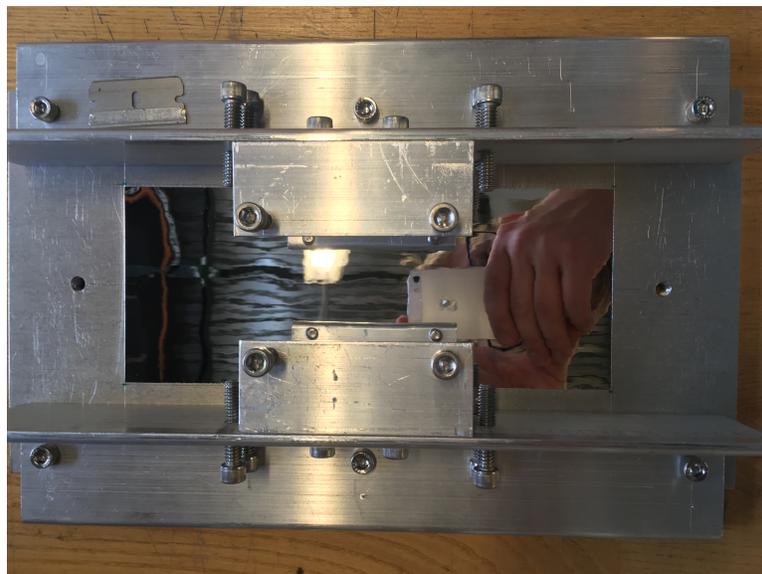
**Step 5.** Remove ESR foils from static bag. Make sure that ESR forms ready (cut appropriate), clean and have no deformation.

**Step 6.** Use razor blade to peel off corner of ESR protective coating. See pic.3 Use fingers to peel back one side off protective coating. Green coating go first, than clear coating.



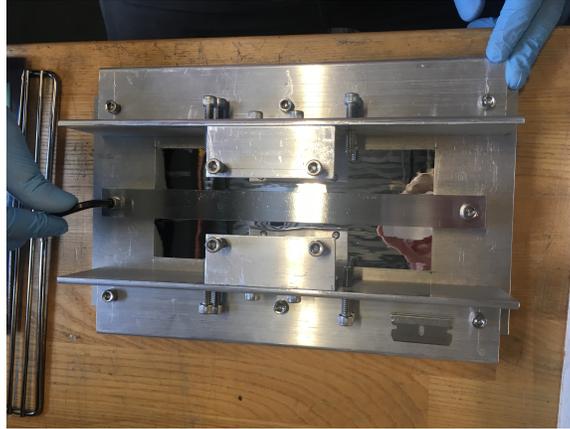
*Pic.3 Protective coating removing*

**Step 7.** Put ESR in the middle of assembly using prescribed markers. See pic. 4 Make sure side with clear protecting cover is facing up.



*Pic 4. ESR film installation*

**Step 8.** Put central bar, line it with the holes in the plate. Screw down central bar tightly. See pic. 5



*Pic 5. Central bar installation*

**Step 9.** Use fingers to gently peeled up one side of ESR and insert first side bar from the side and make sure arrows point toward to center. See pic. 6

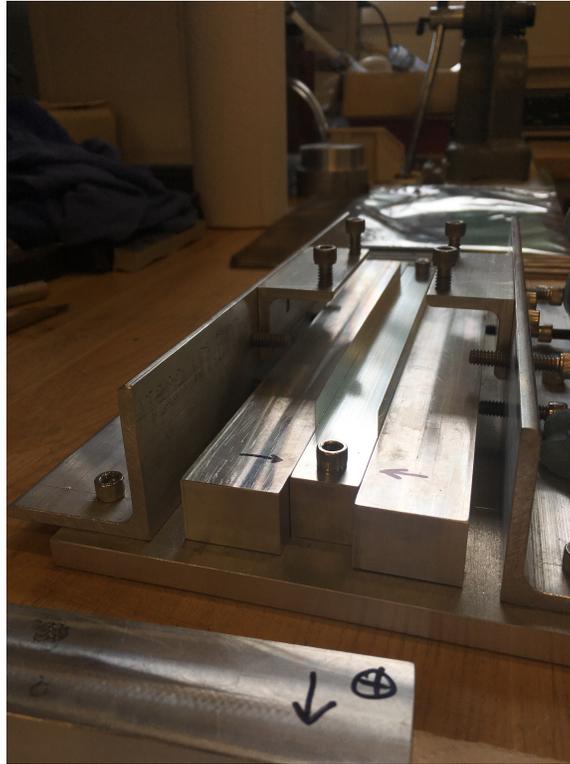


*Pic 6 . Side bar installation*

**Step 10.** Repeat step 9 for opposite side.

**Step 11.** Select one side then using finger applied tension to ESR upwards. Tighten bottom side screws while alternating.

**Step 12.** Repeat step 11 for opposite side. See pic 7.



*Pic.7 Side bars installed*

**Step 13.** Insert top plate from the side. Lift top plate to fold down the top of ESR. See pic. 8 . When plate is in place use top screws to provide pressure downwards.



*Pic. 8 Top plate insert*

**Step 14.** Repeat step 13 for opposite side.

**Step 15.** Thread in top side screws. Make sure all screws is tight. Pre-shape assembly is ready for oven.

**Heating procedure :**

**Step 16.** Make sure the oven is plugged. Place the assembly to the oven.  
See pic. 9



*Pic.9 Assembly in the oven*

**Step 17.** Turn the oven on. Adjust the dial indicator between the end of white marking and first yellow triangle. See pic.10



*Pic10. Dial indicator position*

**Step 18.** Heat oven up to 100° C. Keep eye on temperature, if needed adjust indicator.

**Step 19.** Prepare to set a timer. Once stable 100° C achieved start timer for 10 minutes.

**Step 20.** After 10 minutes on the timer return dial full left. Leave oven to control the temperature. Wait till oven indicator shows 50° C.

**Step 21.** Using shop rags remove the assembly from the oven. Be caution hot metal parts!

**Step 22.** Remove preshaped ESR from the assembly using the reverse assemble process. Start from step 15 proceed to step 7 .

**Step 23.** Place preshape ESR to static bag. See pic 11.



*Pic11. Pre-shaped ESR*

**Step 24.** Repeat assembly an heating process as needed.

**Step 25.** Turn off the oven, return all used material to appropriator locations, clean working place.