

Post-forming

What is it & how is it done.

Wood Manufacturing & Finishing Phase 4

Post-Forming

- What is Postforming?
- Post forming is bending a flat sheet of laminate over a defined shape using a wiping action, heat and even constant pressure.
- The temperature must be monitored so that it does not exceed 163°C or surface damage will occur to the laminate such as blistering and discolouration.

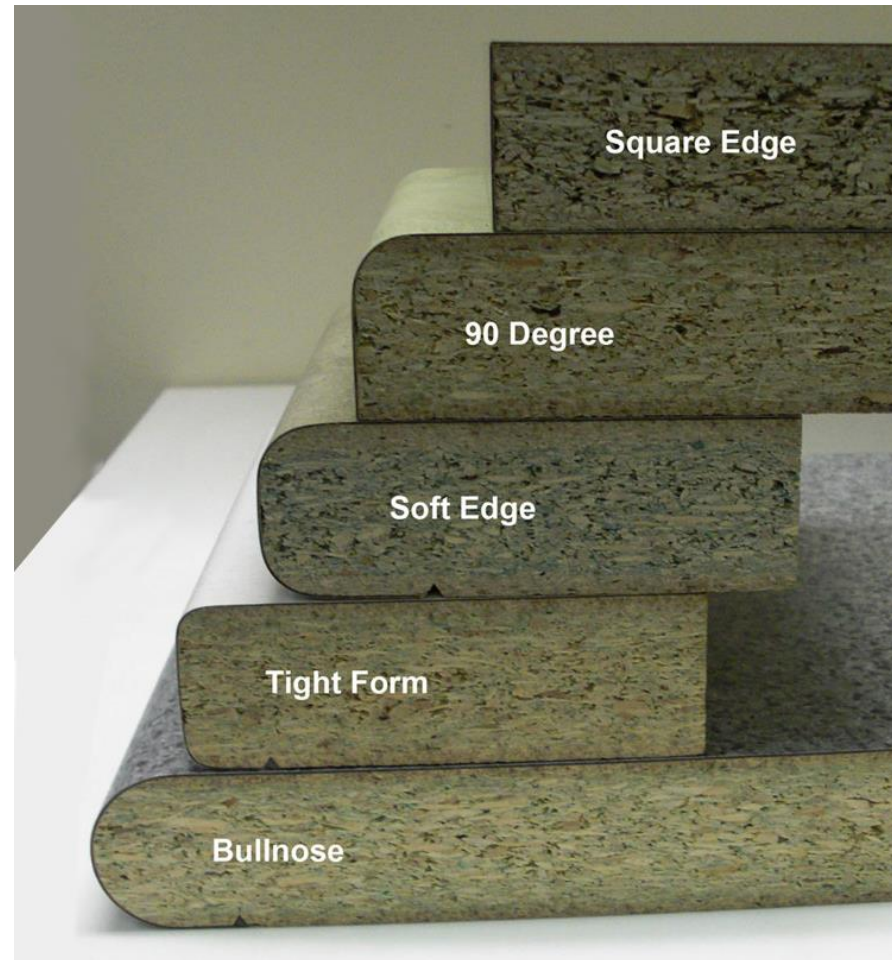
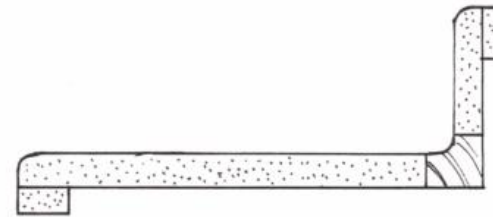


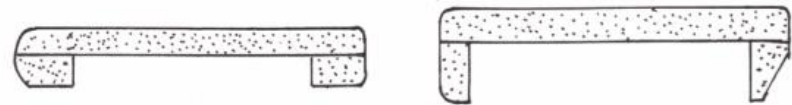
Image obtained from [Sydney Benchtops](#)

Post-Formed Edges

- Can you give me an example of a Post-Formed edge joint?
- Why use curved surfaces?
- Curved surfaces are less harsh than sharp edges and can reduce the appearance of thicker boards like on Kitchen Worktops.
- Where can post-formed Laminate be used?
- Post-formed Laminate can be used on internal and external angles gives one continuous surface.



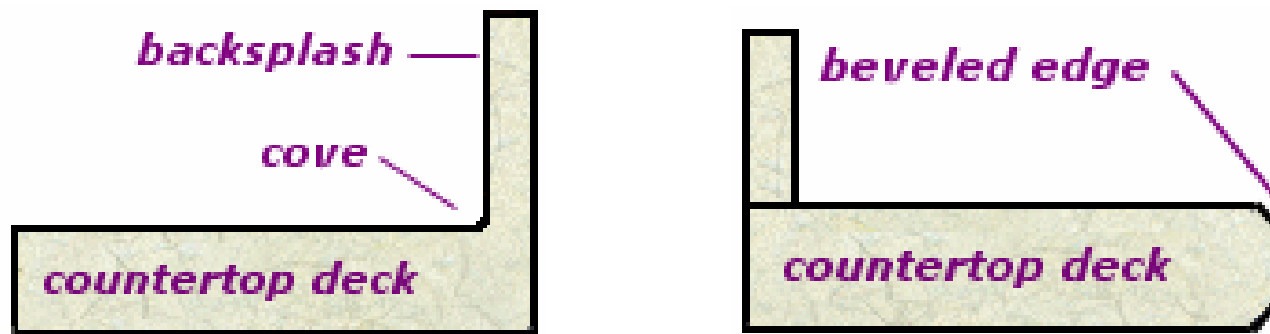
Counter with upstand



Office, Display shelves, Deli counters.
Finished edges on one or both sides

Post-Formed Edges

- What is the advantage of one continuous surface?
- Post-formed Laminate can provide a continuous shape and at the same time eliminate joints in which dirt and water can gather.
- Ideal for counters that will be in wet conditions and are subjected to lots of use, like bathrooms and kitchens of public places, e.g. double rounding and up stands are used on worktops and counters in Deli bars, Public Washrooms etc.



Post-Formed Edges

- When should you not use a post-formed upstand?



Behind a hob



Behind a Belfast sink

Post -Formed Wortops



<https://youtu.be/JzLzuUVKspc?si=VgGO04jOPQEWadRT>

Post formed worktops from VT 3.24Mins

Methods of Post -Forming

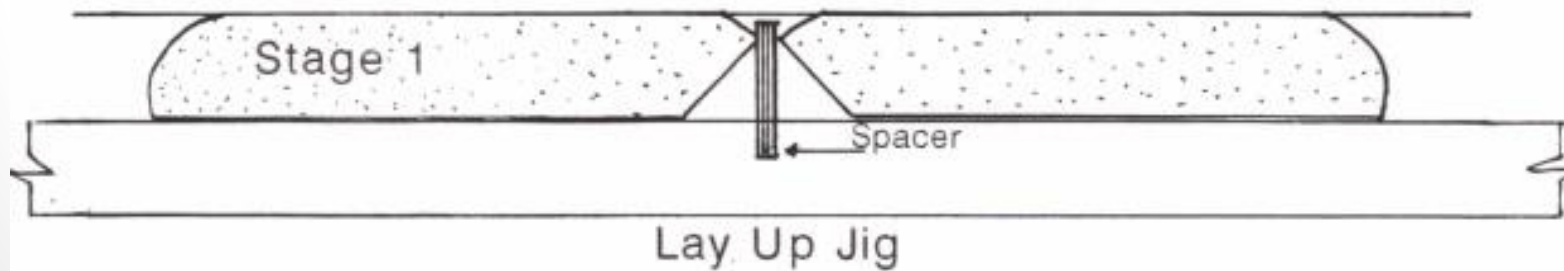
- There are a number of different methods of post forming, e.g. box method, total wrap method and roll former. But the process is always the same
- **Core preparation:** this is crucial to all post forming success. The radius edge or shape must be smooth and continuous and free from dust.
- **Adhesive applications:** Any bumps or hollows will not only interfere with the bond but will show through on the surface of the laminate, esp. on thin or glossy ones.

Methods of Post -Forming

- **Spray application** is the most failsafe method because it gives a smooth even adhesive film. A roller or brush can be used to apply the Neoprene by hand.
- Other glues used are phenol-formaldehyde and P.V.A. glues.
- **Machine methods:**
- Machines using continuous forming process. They vary considerably in their size and output capacity.
- They divide into two groups, using different adhesive systems, i.e. P.V.A.c and contact adhesive.

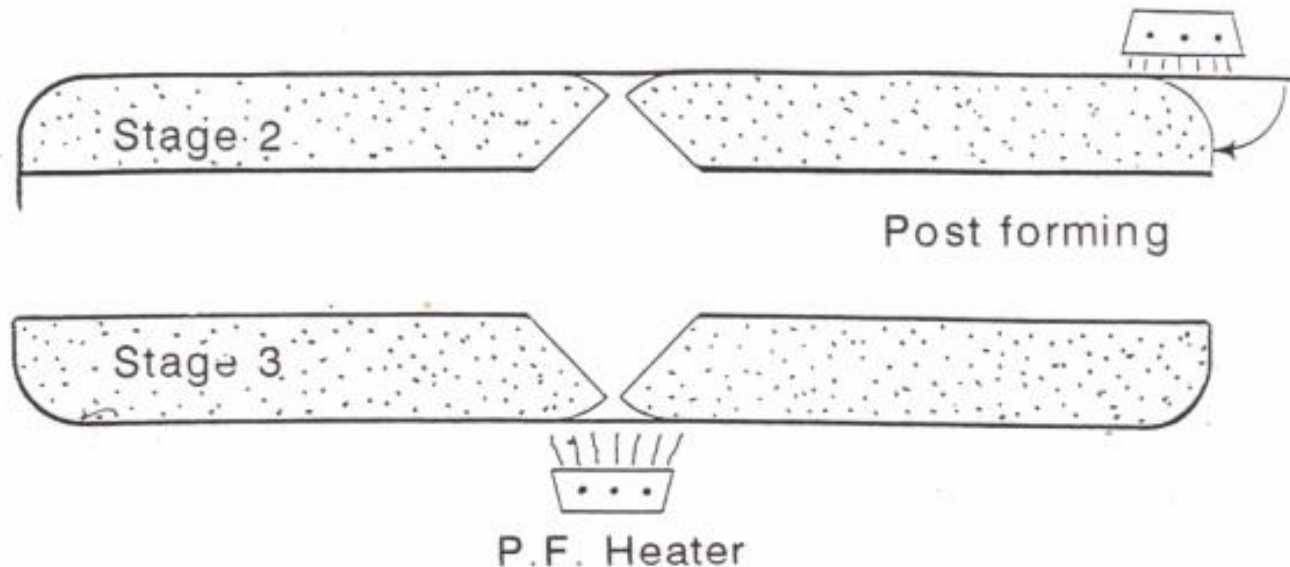
Methods of Post -Forming

- Postforming all share a common operating method in that they accept the panel or chipboard worktop which has a rounded edge and the laminate bonded to the flat area of the panel before bending takes place.
- Often spacers are in place to ensure that the correct distance is between the grounds when the laminate is being presses onto the flat surface.



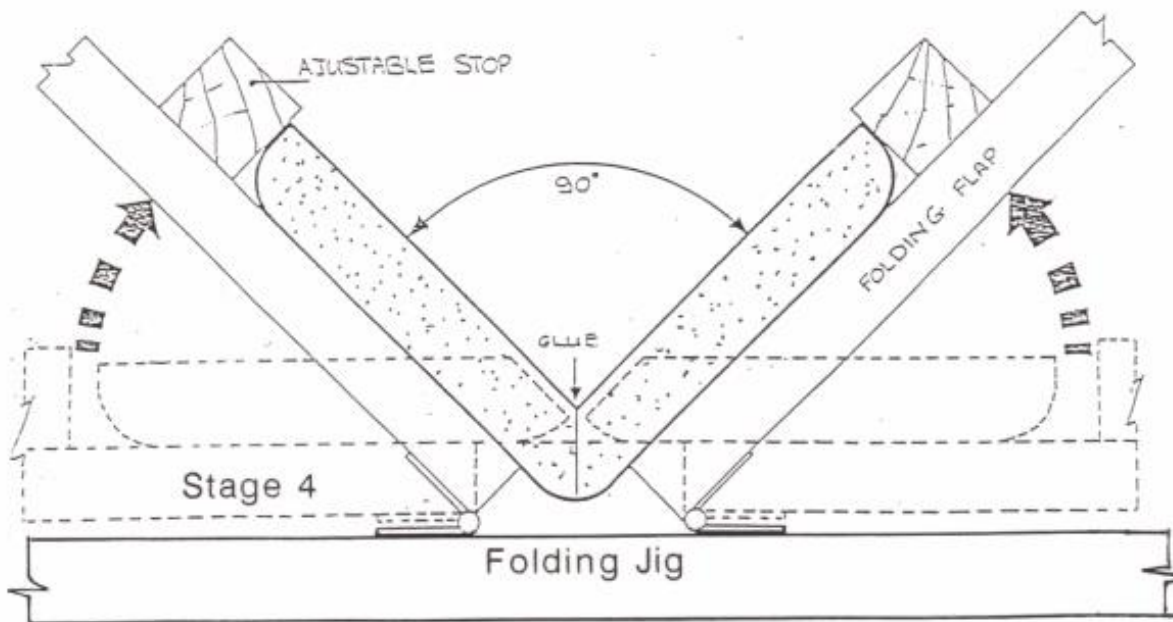
Methods of Post -Forming

- The panels are then carried by means of a chain or belt drive through an infra-red heating element, which heats the over hanging portion of the laminate to 163° as specified by manufacturer.
- Stainless steel bars then turn the now softened laminate over the profiled edge, where the contact glue holds the laminate in position.



Methods of Post -Forming

- Shaped rubber or metal rollers apply pressure to the formed laminate edge until the adhesive is cured and finally the surplus is cut off by another machine.
- Laminates can be applied with at the end of a worktop if a metal or wooden end are not used.



Methods of Post -Forming



<https://youtu.be/ZOQBXfRLntE?si=ELmhslqvNIqVdFWb>
Single sided Post forming (1.31Mins)

Methods of Post -Forming



<https://youtu.be/ALJRBDsmYJs?si=Zh9tqyqVPOW4BK0t>
Postforming laminate over edge. (0.54Mins)

Methods of Post -Forming



https://youtu.be/Tlby8v_XA9c?si=K0YyPSOeRWvt2gDJ

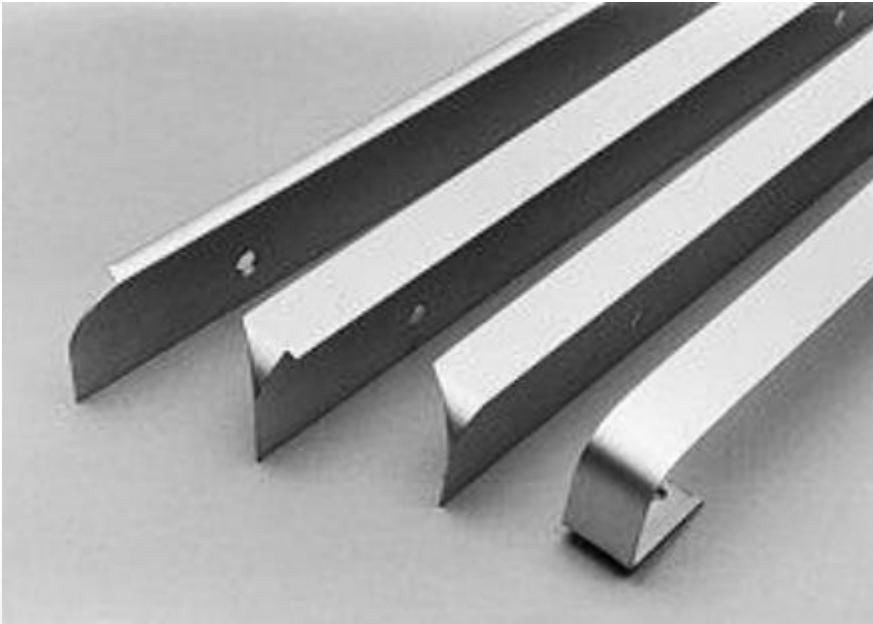
How Countertops are made Episode 1. (2.54Mins)

Plastic Laminate Properties

- Can you name some?
- Laminate properties have to be tested to be able to meet these specifications:
- Resistance to surface abrasion.
- Resistance to boiling water & steam.
- Resistance to dry heat.
- Dimensional stability.
- Resistance to impact, cracking & scratching.
- Resistance to discolouration & colour change under artificial lighting.
- Resistance to cigarette burns.
- Post-formability. **Now you know what this means?**

Worktop Jointing

- Post-formed worktops can be jointed a number of ways. – Traditional jointing strip.

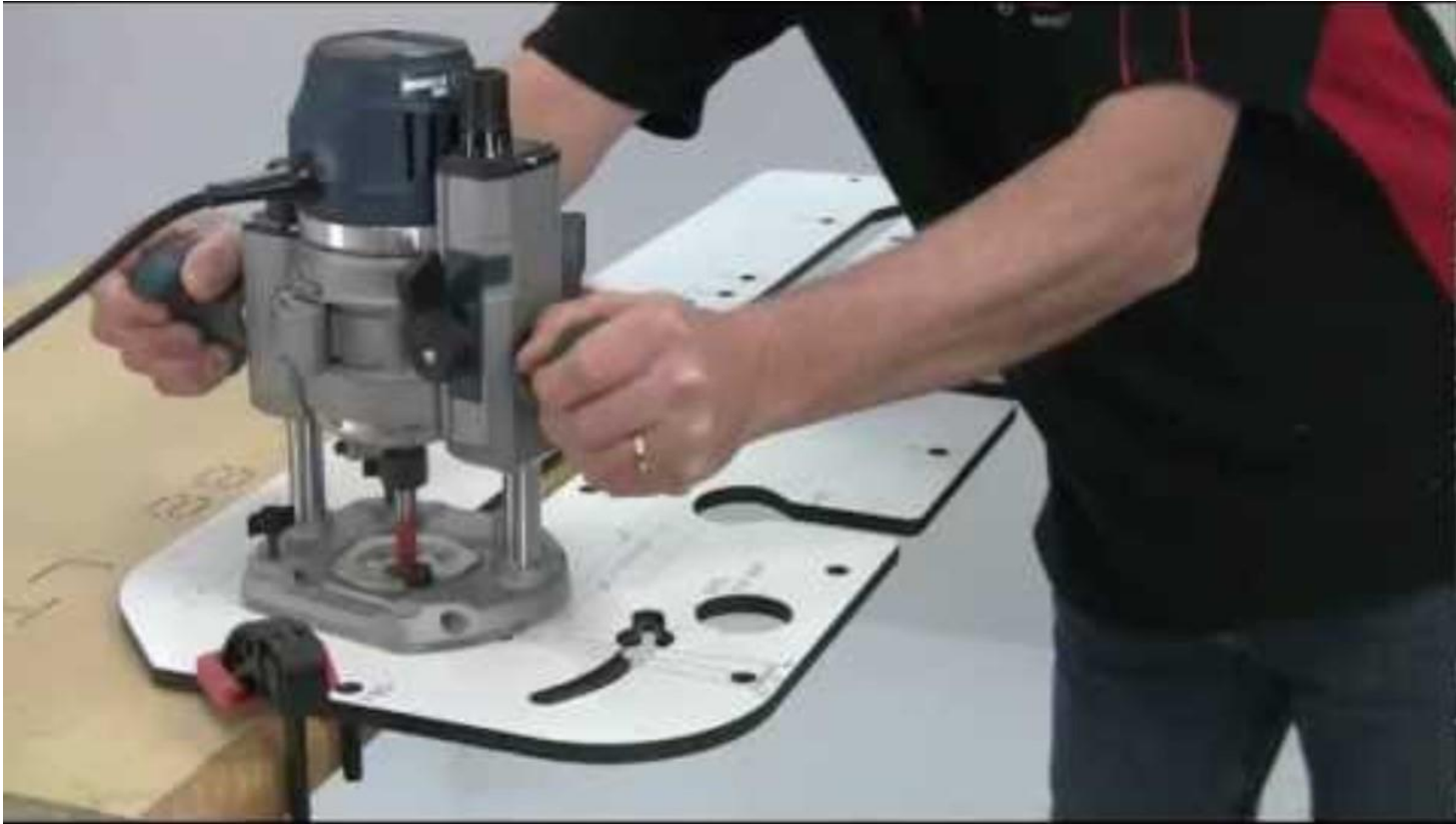


Worktop Jointing

- Worktop Router Jig
- Worktop Connector Bolts



Worktop Jointing



<https://youtu.be/Ux3EZhhYdZo?si=D8MwvVpDc9Lq1gJF>

Cut a worktop joint (3.27Mins)

Revision Questions

- Test yourself
- Click the [link](#) or scan the QR code below.



- Once you have finished the test click submit and compare your answers to the model answers.