

The Laminated Process Instruction for Smart PDLC Glass

Detail Process:

1. Clean glass and prepare the PDLC film:

Pls check and clean the glass, and inspect the PDLC film with power;



Note: the PDLC film normally are smaller about 2-3mm than glass for each side, for example, the glass size:1000*1000mm,the PDLC film size:996*996mm;

2 . Assemble the glass,EVA film and PDLC film together;

The smart glass structure: Glass+EVA+PDLC film+EVA+Glass,let the pdlc film in middle of EVA, leave the space same for each side;

For glass you can use the tempered glass, also you can choose low iron glass or normal clear float glass;

About EVA film, normally we use 0.76mm thickness;



Note: PDLC film don't suggest to use PVB film, some material of PVB maybe damage the PDLC film;

After finish the assembling the smart glass,don't need pass the Pre heating prepressing process like PVB;

3. Use High temperature adhesive tape to seal all side of glass:



4. Put the assembled smart glass in Vacuum bag, keep -0.1Mpa;



5. Move into the laminated furnace or Autoclave:



Note:

pls check the following laminated process datasheet, you need adjust based on your current EVA film specification;

Our PDLC film max laminated temperature: 130 °C;

When you use the Autoclave, In addition to the negative pressure exerted on the glass, the positive pressure applied outside can not exceed 0.25Mpa;

6.Remove the excess EVA glue from the glass edge with a blade

7.Test the finished the smart glass, and use Aluminium tape to seal the all size of smart glass:



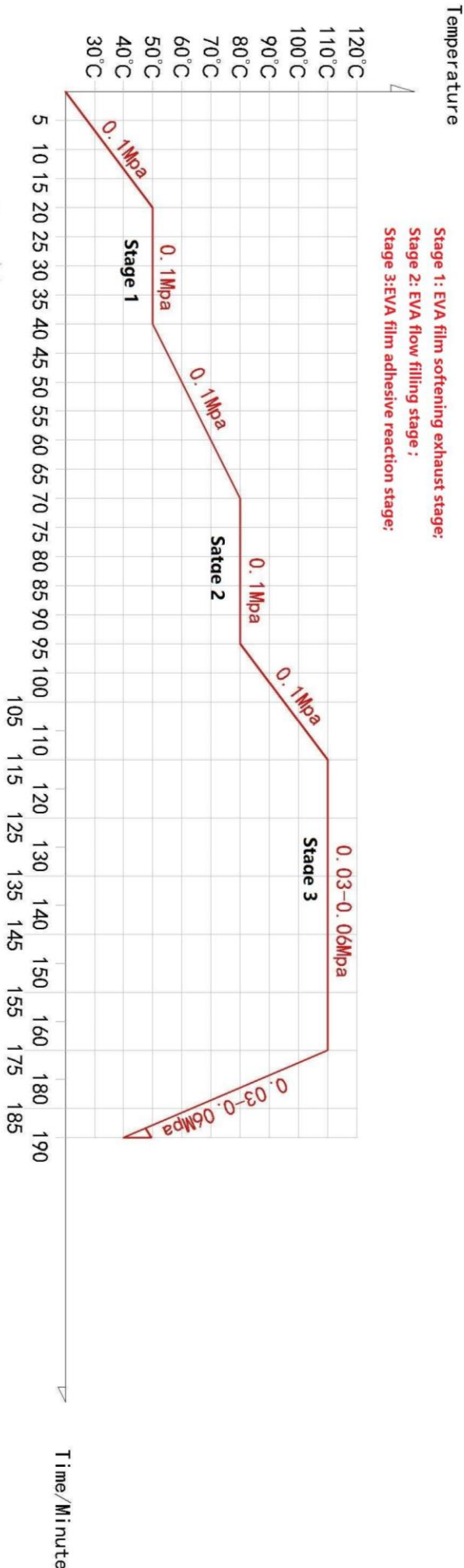
Note: Aluminum tape can protect the glass from damaging the PDLC film by water or corrosive silica glue;

Must use the neutral silicon glue, can't use acid type, it will damage the PDLC film;

InnoGlass

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Attached laminated process datasheet:



Stage 1: EVA film softening exhaust stage;
 Stage 2: EVA flow filling stage ;
 Stage 3:EVA film adhesive reaction stage;

Note: when laminated , the outside environment keep high temperature and pressure, on the same time, do vacuum pressure on the glass from inside,the vacuum pressure 1Mpa;
 Note 2:when you design your dataheet,you need know your EVA film three key temperature:Softening temperature,Optimum temperature of flow ,Adhesive reaction temperature ,you can adjust the dataheet based on your EVA film specification;
 Note 3:when you use autoclave to lamianted PDLC film, In addition to ensuring the vacuum bag to maintain 0.1Mpa negative pressure, autoclave positive pressure can not exceed 2Mpa, otherwise the positive pressure will damage the PDLC film ;