Perfect Prep For Finishing

Steps to insure proper surface preparation before a finish is applied

Factors to consider *before* starting your project

- Wood characteristics
- Type of finish that best suits your project
- Open or closed pore surfaces

Wood Characteristics

- Solid or veneer
- Hard or soft wood
- Open or closed grain pores
- Grain configuration
- Prone to blotching

Solid Wood Preparation

Mill marks that will need removing

- jointer and planer blade ripples
- router or shaper bit ripples
- router bearing marks

Solid Wood Preparation

Removing mill marks

- hand plane
- card scraper
- belt sander
- random orbital sander
- sand by hand

Veneer Preparation

- Determine veneer thickness
- Inspect surface
  - Flatness
  - Figure tearout
  - Figure rippling
  - Applied edging tearout

Wood Hardness

- determines choice of preparation
- affects absorption of finish

Soft Woods

Pine, Walnut, Cedar, Redwood, Fir

Hard woods

Oak, Cherry, Maple, Ash, Rosewood

Open or Closed Grain Pore

Tight grained woods

- Cherry
- Maple
- Ebony

Open grain woods

- Red and white oak
- Ash
- Mahogany

Grain Configuration

Affects surface preparation

Highly figured woods

- Tearout while machining
- Tearout while handplaning / scraping

Blotching

Inherent or Preventable

Inherent - maple, cherry, poplar

- wood cells that absorb finish differently

Preventable

- consistent surfacing

Choice of Finish

Determined by all of the stated factors

Wood type

- solid or veneer
- hard or soft wood
- figured wood
- woods prone to blotching
- oily woods

Choice of Finish

Determined by all of the stated factors

PLUS

- function
- availability
- affordability
- ease of use
- repair ability

Open or Closed Pores

- Horizontal surfaces
  - closed pore with glossy type finish
  - grain pore fillers
    - Should be applied before staining or clear finishing
- Vertical surfaces
  - open pore on less conspicuous areas

Assembly of Project

Protect wood surface from PVA glue

- Glue film on surface
- Glue in pores
- Residual glue
  - Sand hard to reach areas to at least P120 grit
  - Avoid excess glue squeeze
  - Allow glue to firm up a bit before removing
  - Use distilled water for cleanup

Assembly of Project

- Protect wood surface from epoxy and polyurethane glue
  - Glue film on surface
  - Glue in pores
  - Residual glue
    - Sand hard to reach areas to at least P120 grit
    - Avoid excess glue squeeze
    - Allow glue to firm up a bit before removing
    - Use mineral spirits, alcohol or acetone for cleanup

Assembly of Project

Protect wood surface from clamping marks

- No metal on wood contact
- Use clamp pads to prevent crushing
- Use painters tape as necessary
- Use veneer tape as necessary

Inspection before Prep

- RAKING LIGHT is the key
- Inspect fairly close from different angles with 250-500 watt light

- Residual glue
  - - carefully remove with appropriate blade

Inspection before Prep

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Dents

- Steam out if possible - solid and/or veneer
  - Distilled water & clean rag
  - Household iron set to cotton

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Tearout, Defects, Nail Holes

- Use great caution with wood fillers
- Consider wax crayon *after* finishing
- Create a dutchman

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