

Wood Laser Kits 101

Laser structures and cars

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Division 15, SER

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Tools

- Cutting implements
 - Knives, scalpels, razor blades
 - NWSL Chopper
- Sanding media
 - Files
 - Sand papers and sanding film
 - Wood rasps to shape some parts
 - Very fine steel wool (**NOTE**)

Cutters & Sanders



Tools

- Clamps
 - Wood clothespins
 - Rightclamp© corner clamps
 - Magnetic tray with 2 perpendicular sides
 - Weights
 - Check out Micro Mark, Miniature-Planet.com

Assorted Clamps



Tools

- Glues
 - White glue (Elmer's ©) – slow setting
 - Carpenter's glue (Titebond ©) - faster, stronger
 - Watch crystal cement – clear stock to windows
 - Tacky glue – if you have to have removable parts
 - Regular CA – fast hold, just not with wood
 - Gap filling CA – thick, slower setting, holds wood & non-wood well. Use accelerator
 - Epoxy – very strong, but has limitations



Finishes

- Wood Sealers
 - Eliminate fuzzies on the wood
 - Fills the grain
 - Scalecoat © Sanding Sealer
 - Pactra Model Airplane sealer
 - Spray cans from craft stores
- Use breathing mask, fumes can be noxious

Wood sealers



Finishes

- Paints and stains
 - Stain before you seal
 - Seal before paint
- Paint
 - Enamels & lacquers
 - Acrylics will warp unsealed wood
- Commercial stains
 - Use ones without polysealers



Finishes

- Home made stains
 - India ink in alcohol
 - Black ink = grey
 - Brown ink = reddish brown
 - Steel wool in vinegar
 - Brownish black



Assembly

- Open the kit & read the instructions!
 - Quality of instructions varies.
 - Check the web for build/reviews
- Decision time for finishing
 - Stain before sealing or gluing
 - Solvent versus water based paint
 - Openings now or after paint
 - Paint parts separately or can you mask

Assembly

- Break down into sub-assemblies
 - Work different parts while glue sets
- Make an assembly jig for windows
 - Strip wood or plastic in a 90° angle
 - Keeps sashes and glazing square
- Build on a flat surface
 - Piece of plate glass/ surface plate

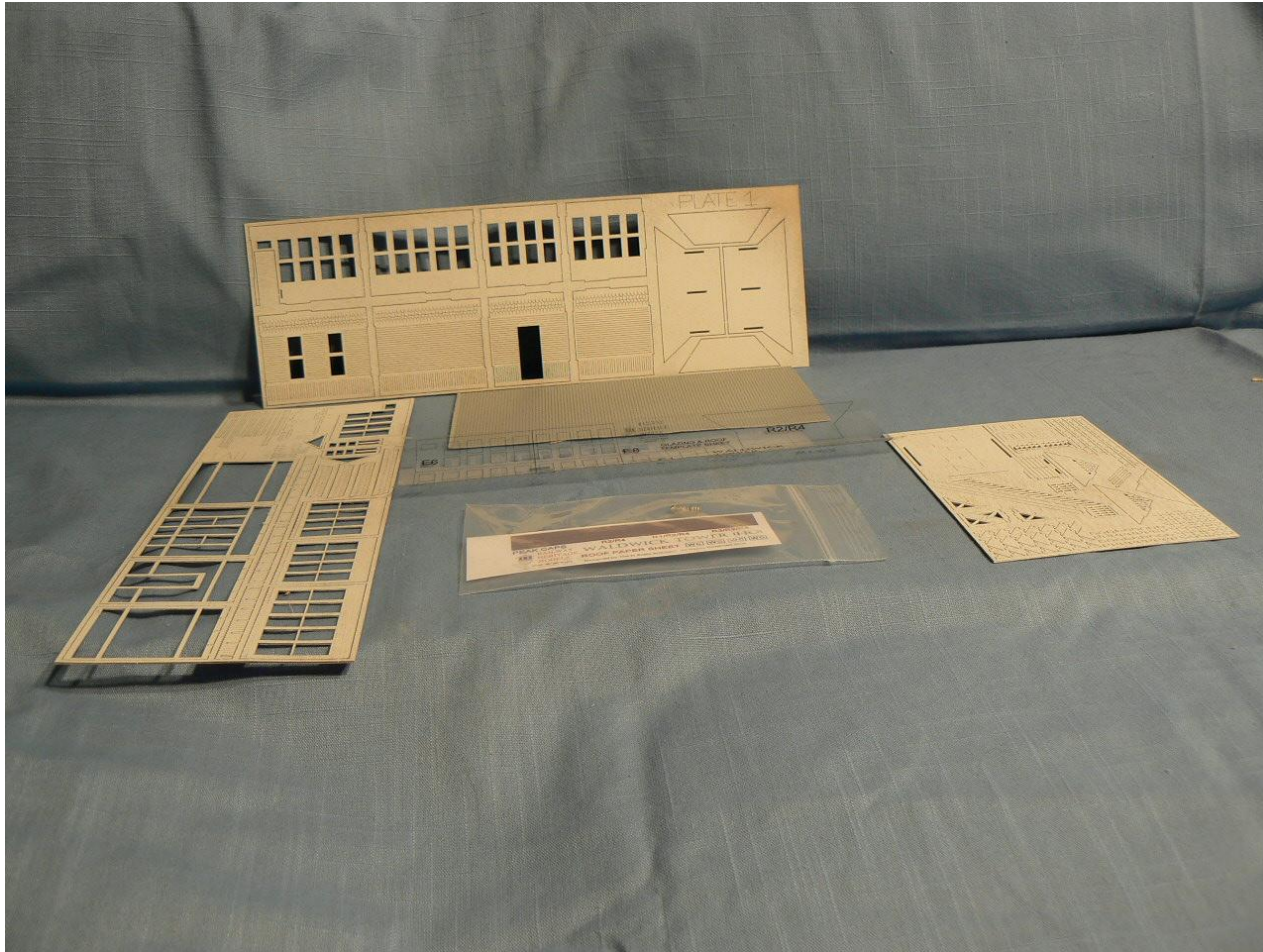
Corner jigs



Structure Kit

- Decide on paint colors
 - Stain and paint parts on sheets, if practical
- Remove parts from sheets & sand the nibs
 - Affects fit, especially corners
- Build core, making sure it's square.
- Cover sides with overlays
- Build up windows and doors, then install
- Add interior and lighting, if desired
- Build up roof and install

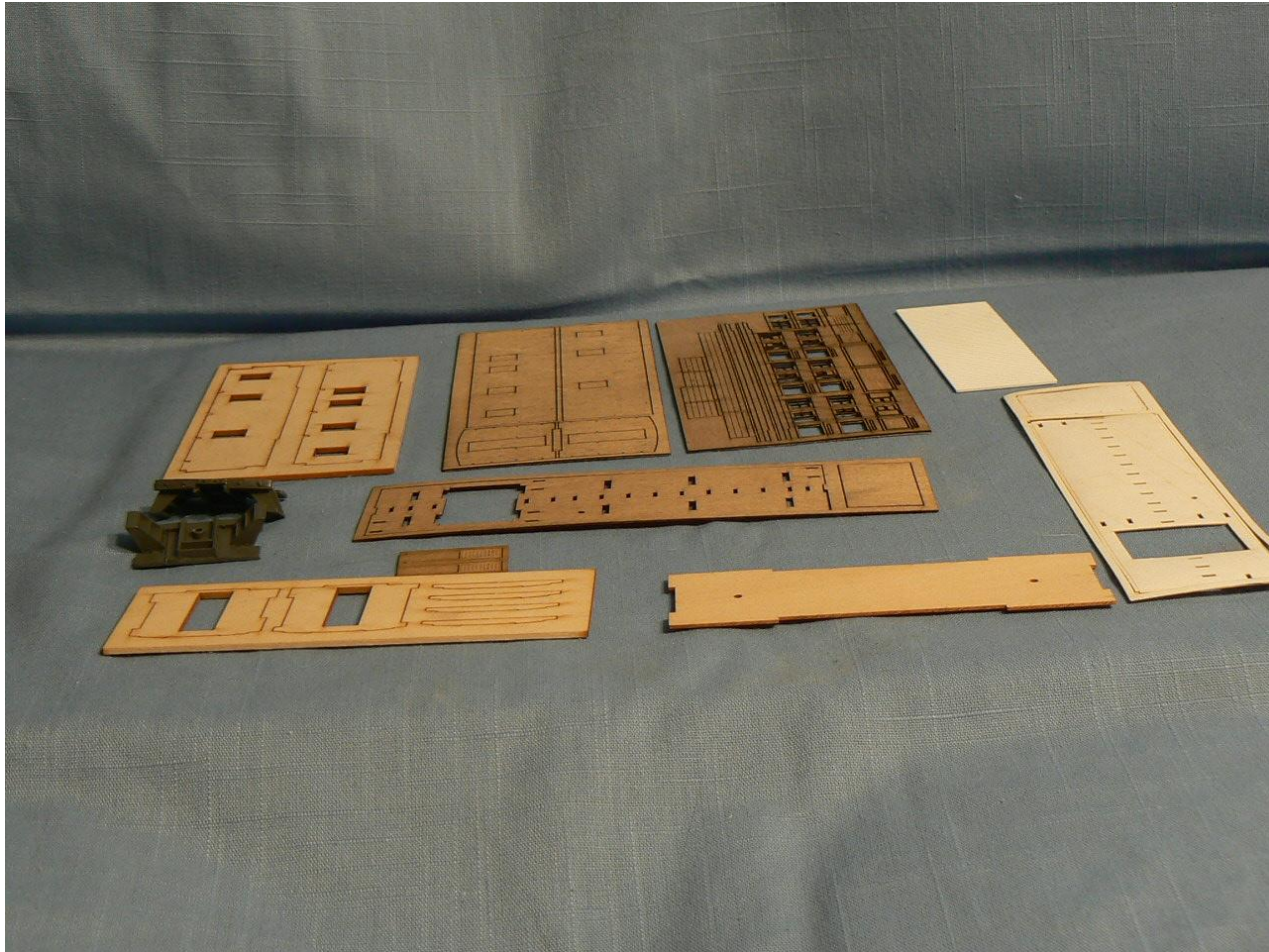
Erie Waldwick Tower



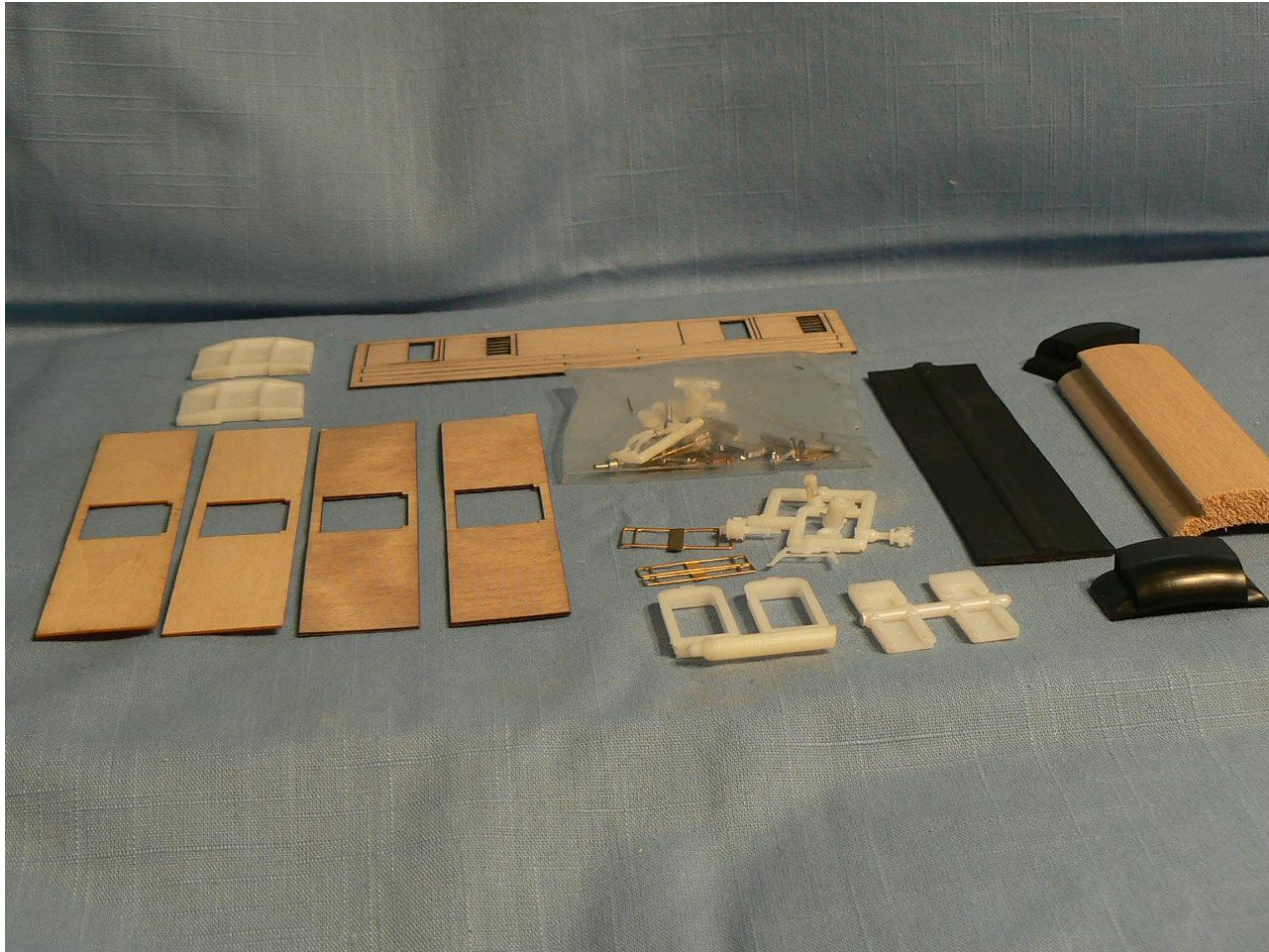
Rolling Stock Kit

- Typically caboose; some other rolling stock
 - Baggage, coaches, milk cars
- Basic construction similar to structure kit
- Underframe & brake equipment
 - adding brass, resin, plastic detail
 - gluing different materials
- Couplers and trucks not included

Santa Fe Caboose from AMB



Short Baggage Car from BCW



Questions

- ? ? ? ?

Selected Sources

- Structures
 - <http://www.btsrr.com/>
 - <http://www.laserkit.com/laserkit.htm>
 - <http://thenarch.com/>
 - <http://www.branchline-trains.com/index.html>
- Rolling Stock
 - <http://www.bethlehemcarworks.com/>