

## Victorian Railways 30 ft Goods Shed.

Thank you for purchasing one of my many kits and I hope you get many hours of enjoyment from it.  
Chris Pearce (Spirit Design)



Typical  
Victorian  
Railways 30 ft  
goods shed.

Photo courtesy  
Phil Jeffery.

### The Kit.

The laser-etched/cut kit consists of several parts. These will be identified during construction (P1 etc) to aid the builder in assembling their kit. The slight *Smokey* smell from the kit is part of the laser process and will disappear in time or when the unit receives its paint and weathering. This kit can be put together in under 2 hours. Only minimal tools and basic/intermediate skills are all that is required to build a very accurate model of this common shed seen throughout the Victorian Railways system. It is suggested that you read through the instructions first to become familiar with the components and the essence of construction. There are a few steps that require close attention and they are highlighted in ***bold and italics!***

**Basic history notes:** (more notes see [www.spiritdesign.com.au](http://www.spiritdesign.com.au)).

Since first being built in the late 1890's the basic shape and construction of the 30ft 2-door unit has not varied all that much. Sheds were built at provincial stations as a safe means of storing and housing goods between delivery to the markets of Melbourne and rural towns throughout the VR system. Timber construction was used throughout which was then covered in a skin of corrugated iron, a familiar sight in Australia's history. Floorboards were 5½" - 6" in width with a ½"-¾" inch gap to the next board. The 30ft goods shed is in fact 31' x 21' walls as it is the inside measurements that the VR used to classify these units. Measurements taken from some surviving units and plans show this to be the case although some minor variations existed in the system.

**Variations:** If you look hard, enough you would probably find a variation that suits your needs, as each area seemed to adopt some localized customisation of their units. Generally, the 30ft did not have an office door or end window but photographs of some units do show this. As a result, the kit is supplied with an extra door and window plus a template to allow these if you wish.

**Louvres:** Plans show that louvres were not part of the original build for 30ft or 50ft goods sheds but were for the 90ft variety. Over the years these were added to sheds in the end walls but were more common in the 50ft version rather than the 30ft. AMRM April 1989 shows Yinnar goods with a wooden louvre in the end walls and Lockington is the more common unit without louvres. When building your model the choice is, yours based on the photos you have access to.

**End doors:** An end wall door (30ft version) was not common but Yinnar did have one and other sheds have some as well, only photos will back this up

**End wall window:** Windows were a common feature when later fitted to the 50ft versions and some 30ft units might have been fitted but I have not seen any photographic proof yet. This kit includes a special end wall template to allow you to cut one out and fit the window if you so desire.

**Bump boards.** Not all sheds had them. There are many versions of bump boards on these units and over the years, they were replaced, added to or removed from the shed. Photos of your shed will aid in their placement. Enough boards are provided in the kit to do all sides.

**Water tank.** When water tanks were fitted they would be at the opposite end wall that had the door and window. Tanks could also be placed either left or right of the centre depending on the location.

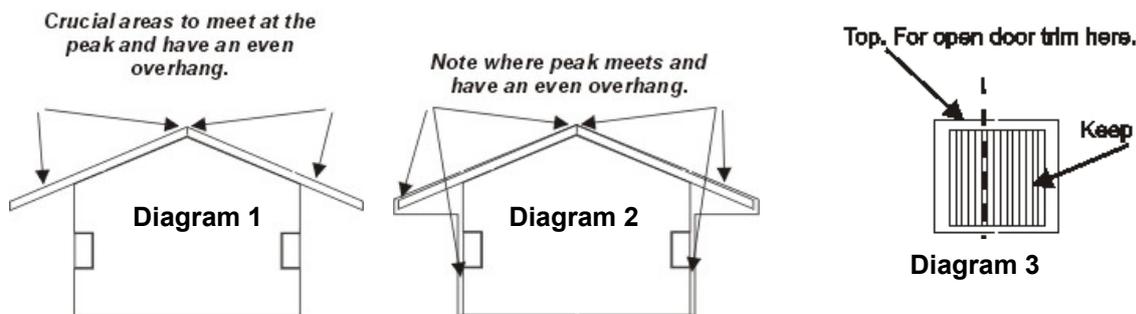
### Assembly

Suggested glues are Triton woodworking glue (**best**, very quick drying PVA and can be sanded) Selleys Kwik Grip water-based, PVA wood glues or Araldite.

Note: When needed (laser sheet parts) gently cut each item from the laser etch by cutting through the holding tab with a sharp knife. It is easier to view the holding tab by turning the sheets over so only the outlines are showing (no surface details present). Clean up all support tabs from etched/cut pieces with a small file before gluing and assembly.

After deciding on your prototype you will need to decide which MDF end walls, you are going to use to complete your model. These are the internal structure upon which you will glue the outer laser etched/cut sheets.

1. Glue an end MDF wall (**P1**) to the side MDF wall (**P2**).
2. Glue the other sidewall (**P3**) to this end wall and side.
3. The end wall you decide on will govern what your end wall will look like. If you decide on a plain wall (**P4**) then glue this in place. If you decide on using the wall with window and door openings (**P5**) in the MDF you must glue this piece in instead; paying attention to whether you want the window on the left or right side of the wall. You can rotate the MDF end wall 180 degrees to alter the placing of this.
4. The centre small MDF (**P6**) roof brace is glued centrally above the large door openings.
5. **It is crucial that the model, whilst still wet, is set down square and all four walls are at 90 degrees to each other. Use an engineer's square or something you know is square to aid you at this point. Using a ruler make sure all the roof peaks are in line with each other. Set aside the MDF base structure unit until it dries before proceeding with the next step!**
6. The inner roof support sheets (**P7**) are glued to the MDF structure. **It is very important that the edge of the inner roof is in line with the gable peak of the MDF base structure and that both inner roof pieces are dealt with the same way whilst the glue is still wet. See diagram 1 below.**



7. The end walls (**P8**) are glued to the MDF end walls. The tip of the sidewall (winglets) corrugations should be in line with the inner roof edge and this forms an extra-strength section for a unit. **See diagram 2 above.** If you are unlucky and break these units 4 winglett repair pieces (**P9**) are provided for strengthening. **If you intend to put in a window or door in one of the ends use the template, (P20) provided and remove the doorway or window opening as required. Use a very sharp blade to accomplish this, as a blunt one will crush the corrugations. Make sure that each of the end walls (laser etched) overhangs an even distance on either side of the MDF as this projection covers the sidewall thickness of the plywood sheet.**
8. The sidewalls (**P10**) are glued in place along the MDF structural frame making sure that the overhang from the end walls meets the edge face of the wall. If there is a gap, you can glue or fill this section up before painting.
9. The 2 corrugated roof pieces (**P11**) are glued to the inner roof to form a peak **but also make sure that there is an even overhang at each end wall and even overhang over the inner roof pieces. Please pay special attention to this point as this part forms the look and feel of the entire model and is worth spending a few extra seconds getting the overhangs and centralization right.**
10. Doors (**P12**) can be fitted either open or closed. It is up to the modeller. Doors opened to the left when viewing the model side-on. If you choose to have, an open door remember to paint the inside of the model dark grey or black. Run a bead of glue along the inside portion (next to the MDF) of the walls where the door is on the corrugated iron walls. **Make sure that the smallest border of the door surround is facing the bottom of the model and the larger section goes towards the roofline.** If you intend to have an open door trim the door as per **diagram 3** and run the glue along the inside edge of the wall on the top and 1 side only. Gently push the door into position, **see Diagram 3 above.**
11. **Optional step.** Glue the window (**P14**) and end door (**P13**) into the end wall if you decided this in step no. 7. The window can be altered by removing the top and lower panes to create a 2-pane window that was also common on later units.
12. The gable end bargeboards (**P15**) are glued at each end wall of the model centrally and out to the corrugated roofline line. The effort that you put into steps 7 and 9 will show up now and you should have a perfect model.
13. **Optional step.** Using the gable bargeboards as a guide the end louvres (**P16**) are glued to the end walls using a drop of glue in the centre only on each piece. Line up the top of the louvre with the gable

bargeboard as a guide. Do not push the louvre up too high so that it hits the roof. It should be in line with the lower point of the gable bargeboard (P15) peak.

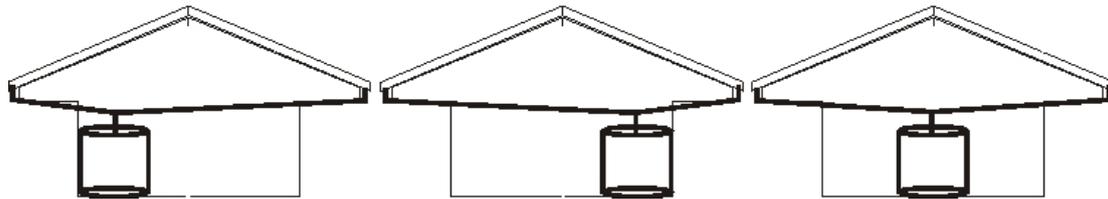
14. The two-roofline bargeboards (P17) are glued into place just underneath the roofline. They should be just in front of the winglets and 1/2mm back from the roof edge. *See the photo below in step 15.*
15. There are ten roof overhang supports (P18) but only eight are needed. Extras are included in case you break or lose some. Place a dab of glue at each end of the angle support and attach it to the model using the photo below as a guide.



Completed model before painting. Note the bump boards should not be glued in place until painting and weathering is completed. These were placed in their final positions to show you where they are on the model. End Boards can also be applied to each end as well.

16. Glue the styrene rod into the centre line fold and when dry glue the paper ridge capping to the apex of the roof of the goods shed.
17. **The model should be painted and weathered at this stage before proceeding to step 18.** Please see notes on weathering below.
18. Glue the 4 smaller bump boards (P19) between the door edges and the sidewall ends using the photo of the completed model as a reference.
19. The larger bump boards (P20) are for the end walls if required.
20. Downpipes and guttering are not offered, as there are so many combinations. Photographs of your favourite shed will help here. The diagram below is some of the possible scenarios.

*The tank can be in any of these combinations.*



### Painting your model:

**Note: This is not the definitive guide to VR colours on goods sheds but rather a helping hand as research shows so many colour combinations existed at any one time a special web page would need to be set up as a cross-reference. Submissions welcome.**

**Galvanised iron cladding:** As the shed was made of galvanized iron, you have a choice of colours to paint it. Humbrol G11 Silver (new gal iron) or Humbrol M54 (Light Grey with white added for a dull appearance of weathered iron) all over except for doors and windows (if used) and bargeboards, wall extreme edges where no corrugations exist.

*Note: Depending on the period being modelled, some units were painted various shades of VR standard colours. Only colour photographs or books can help you here.*

**Doors and trimmings:** Doors and bargeboards were usually the same colours but varied from area to area after initial painting by VR way and works personnel and contractors. Known colours are light pale green, red-brown, chocolate, cream Humbrol G7, crimson brown, grey, white and VR roofing red.

**Louvres** are usually cream or left plain but can be the same colours as the bargeboards. Again local area dictated colourings.

**Angle supports** for roof and winglets were made of either angle iron or wood and were painted either the bargeboard colours or door colours. Again, colour reference photos will help or research by Phil Jeffery below may help.

### Pre 1960

Wall plinths, angle stops, architraves, barges, gutters, door framing, verandah posts	Dark Brown – Floquil RR Roof Brown
Weatherboards, window sashes, facias, door panels	Light Stone – Floquil RR 87 Depot Buff
<b>Post-1960 – Style 1</b>	
Architraves, sashes	White

Walls, fascias, barges, gutters, verandah posts

Doors

**Post-1960 – Style 2**

Architraves, verandah posts, corner posts

Walls

Fascias, barges, sashes

Doors

**Post-1960 – Style 3**

Architraves, fascias, sashes, verandah posts

Walls

Doors

Suntan – Floquil 23 Flesh

Grey/Green – Floquil RR 41 Light Green & Floquil RR 9 Primer

Grey/Green – Floquil RR 41 Light Green & Floquil RR 9 Primer

Cream – Floquil RR Antique White

White

Terracotta

White

Grey/Green – Floquil RR 41 Light Green & Floquil RR 9 Primer

Terracotta

**Weathering** It is really up to you how far you weather your model but I like to give a heavy weathering as most of my models are around the steam-diesel changeover and were neglected in the modern era just before they were torn down.

My weathering consists of the base colour which is Humbrol M64 (with white added) thinly washed over the entire model except for the doors. A very fine black pencil is used to run across the corrugated sheet horizontal lines, not the vertical lines to emphasise them before final weathering. Next, a stencil brush is used to apply the weathering shades (a cheap brush with most of the hair chopped down to 2.5mm of the head purchased from a cheap art supply). A palette (PVC ice cream lid) with a small amount of rust colour Revel 85 or Humbrol M82 (with a bit of black) is used as the base colour. A pool of fresh thinners is also resting on the palette and aids in thinning down the rust colour. Using the stencil brush, load a thinned coating of rust onto the brush tip and paint a small section of the PVC palette to remove most of the colour before streaking a 5mm x 5mm or 5mm x 3mm area. The brush stroke is a down arc movement whereby you load the main part of the colour and touch the brush to the corrugations and as you draw the brush down you move in further away from the shed so that by the end of the stroke virtually no paint is deposited down at all. This is far harder to describe than actually putting into practice what is said.

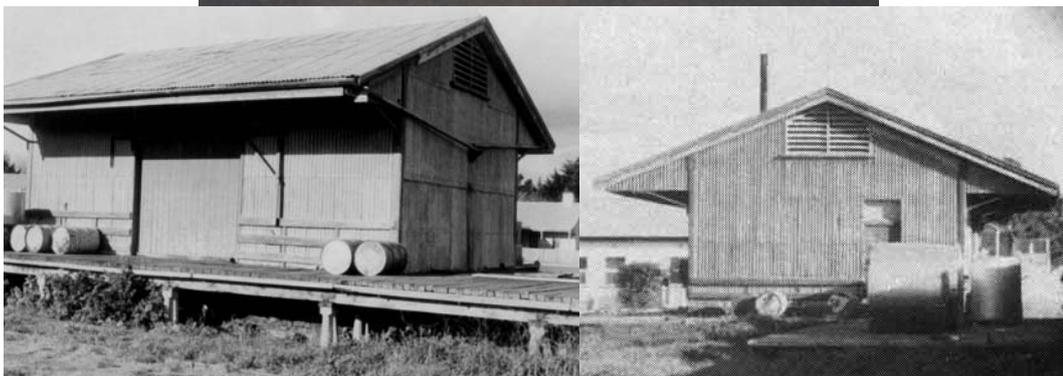
**Tip: practice this method on an A4 sheet of paper until you come comfortable with this method then approach your model with confidence.**

Create a very random pattern of rust areas across the entire corrugation area (where exposure would cause rusting) using photos from books or magazines as extra reference material. Train Hobby put out a range of colour books on country VR stations, which are handy for reference photos. Occasionally work over the areas just painted with a brush loaded with just thinners only to wash out some of the colours. Repeat this procedure with another slightly darker red-brown until a patchwork effect is across the model. Set aside to dry for a while. Using spit (yes spit!) and artists' soft pastel pigment sticks (AS Artist Soft Pastel Pure pigment by Art Spectrum) interweave other rust and dust colours onto the corrugations creating random patterns with the stencil brush.

Next, I use Derwent water-soluble pencils and spit to draw extra rust, shadow and dents around the completed model. Derwent watercolour pencils (24) will set you back about \$30 and should last a lifetime of weathering. Weathering powders can also simulate rust and the elements' exposure.



The completed pre-production model shows open doors with applied painting and weathering.



Yinnar 30ft goods shed with end vents and end door opening.

Photo courtesy of Phil Jeffery.

A growing range of N, HO and O scale railway kits, decals, special interest souvenirs, modelling tools and aids

### Laser cutting/etching

A laser cutting service is offered, which can aid your kit manufacturing or just one-off items, which may be difficult to make any other way.

Various materials can be cut up to 9mm thick, Plywoods, MDF, Acrylic, Styrene, Cardboards, Balsa, Basswood to name a few. Do you have an idea that could benefit others? Then talk to Spirit Design about limiting your lasers costs by enabling the item to be released under the Spirit Design banner.

### Future releases

Laser Kits for future release include VR C van for passenger trains, M cattle van, ZL guards van (2 types), CE & CW passenger guards vans, AS and BS Spirit of Progress carriages, VR departmental house, 2 versions of VR Signal Boxes, VR stations and modern image wagons.

N Scale Locomotives include GM diesel phase II (beginners) and an R class 4-6-2 steam engine (experienced modellers).



Laser parts list referred to in the text.

### Other kits in the range include.

AE, BE, ABE, AW, BW, ABU/W, BCE laser-cut passenger car kits.

FJ class bulk flour wagon.

Also special decal packs for the flour mill logos.

J class cement medium & large domes

LCL containers, BHP 20ft containers

Brass etch ladders

Brass etch shunter steps and stirrup steps

Brass etch wagon handwheels (3 types)

Brass etch spider handwheels

Brass etch 20 ft Southern Cross IZ pattern windmill

Brass etch 85ft VQDW container flat wagon

VPCX / JX 3 pot cement wagons in VR-V/Line-

Freight Australia colour schemes

U van plain or corrugated roofing is available

U van decals

KC, P, M van 4 wheel wagon kits

Victorian Railways picket fence in 100 ft lengths

See my website for future projects as they are being made, with photos of test shots and pilot models

Many new laser etched/cut kits will also be available

Feedback and comments are always welcome:  
[chrispearce@spiritdesign.com.au](mailto:chrispearce@spiritdesign.com.au)

### Laser-cut Permanent Way Goods shed.

*1st laser-cut N Scale Australian kit*

