

## <u>Bowaters Models – BMV Series Instructions</u> <u>Van 4/Van 5</u>



#### **Requires**

- Accucraft Chopper Couplings (Z1 or Z2)
- Bowaters Models FR Modern Coach Bogies (Own Choice of Gauge)
- 2-3 A3 pieces of Craft paper
- Glazing Material

#### **Required Tools**

- Fine Sandpaper/Emery paper or boards
- Small Files
- PVA Glue
- Super Glue
- Sharp Craft Knife

## **Prototype Information**

Both Vans 4 and 5 were built by Brown, Marshalls and Co in 1880 for use on the Ffestiniog Railway in Wales originally without room for Passengers with a Balcony at one end. Both were rebuilt in 1929/1930 at Boston Lodge to have both 1<sup>st</sup>/3<sup>rd</sup> class passenger compartments as well as a Guards compartment. During their rebuilds, the balconies were both removed. During the 1955 renumbering, both vans became Coaches 11 and 12 with Coach 12 (Van 5) being rebuilt to a length of 30ft I 1964 while Coach 11 stayed its original length and was converted into an Observation coach. Both being fitted with corridor connections to be run coupled back to back. Both have recently been rebuilt back to 1963 condition in which condition they both run today.

## About the Kit

The kit is a wooden kit comprising of a set of laser cut wooden parts and 3D printed duckets.

### **Chassis Fitting**

This kit is designed for HGLW Bogies. These are assembled as per the instructions with no modifications required. On the top chassis piece, normally distinguishable by the laser cut detailing on the top surface, flip it over so the detailing is facing down. Then draw a straight line down the centre of the piece lengthways. This is needed so that once the chassis has been assembled, the correct position of the bogies can be achieved. They should normally be added once the chassis has been assembled and should be placed 90mm along the line from each end of the coach. Alternatively, you can attach the bogies closer to the end of the coach to dramatically reduce the minimum radius.

## **Couplings**

This kit is designed to take Accucraft Chopper Couplings (available separately as their part number Z1/Z2). These should be attached into the flat sections below the main coach bodies. These have been positioned so as to be at the correct height for the 16mm Association standard coupling height. We strongly recommend setting the coupling height against your existing motive power fleet.

#### Instruction notes

With these instructions, there are images which show various stages of the construction of the Barn Observation Coach kits. They are of the Digital Builds for Vans 4/5 which may not be representative of the kit you have brought. They are for reference purposes only.

## <u>Painting</u>

Over the time period the coaches we have produced have operated, they carried various paint schemes.

- 1957 to 196? Cream and Light Green.
- 1958 to 196? Varnished Wood
- 196? 198? All over Maroon (Closest match is Humbrol 20 (Crimson Gloss))
- Push Pull Paint Scheme of Cream and Green (Closest matches are Humbrol 41 (Ivory) and Revell 364 (Leaf Green)) for coaches 117, 121 and 112 to 114
- 199? Present Modern FR Coach Paint Scheme of Cream and Maroon (Closest matches are Humbrol 20 (Crimson Gloss) and 41 (Ivory))

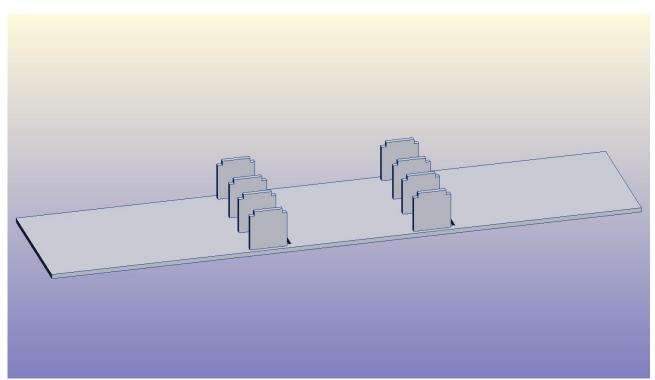
## **Beading** Notes

These instructions cover the latest generation of kits produced after March 2019. These can be told apart from the earlier kits by having one piece beading sets for the sides and ends.

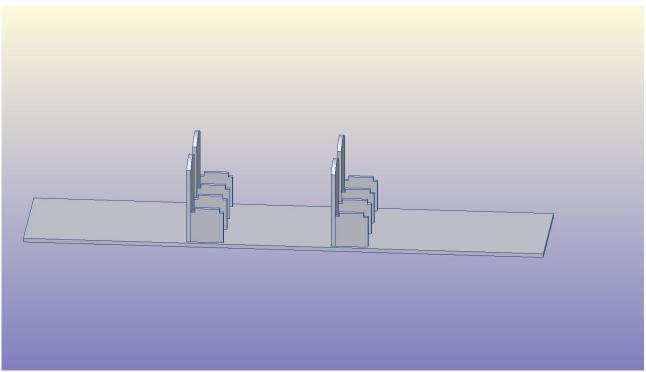
# Please Turn over

Please read though these instructions before beginning to assemble your kit

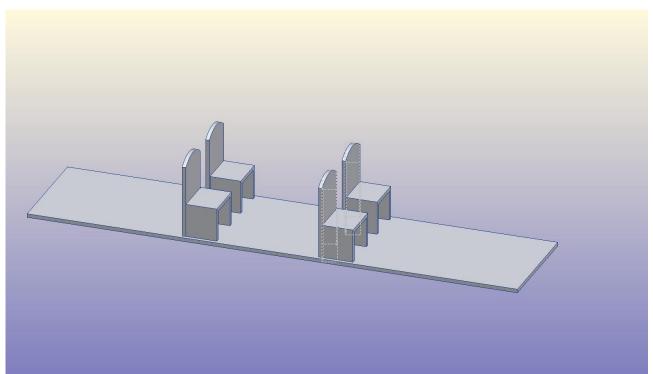
### VAN 4 ONLY



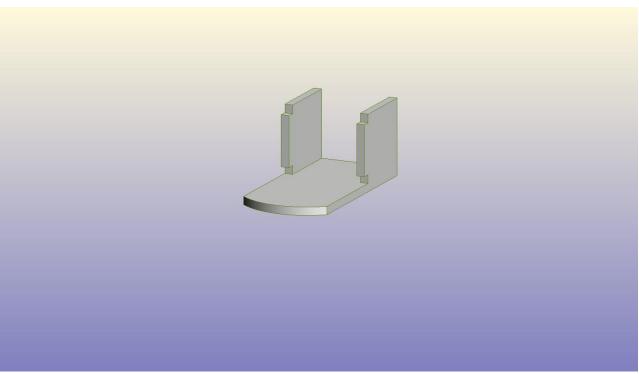
Start by gluing the seat supports into their slots on the chassis plate. These are the smaller of the similarly shaped components (the larger ones are the table supports).



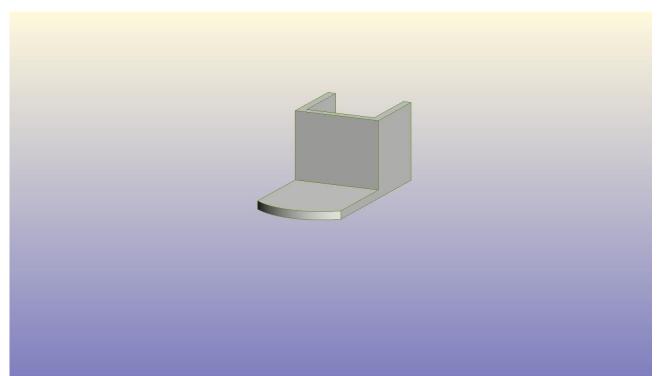
*Next, glue in the seat backs into their slots on the chassis plate. These will slot between the seat supports where there is a group of 4 supports together.* 



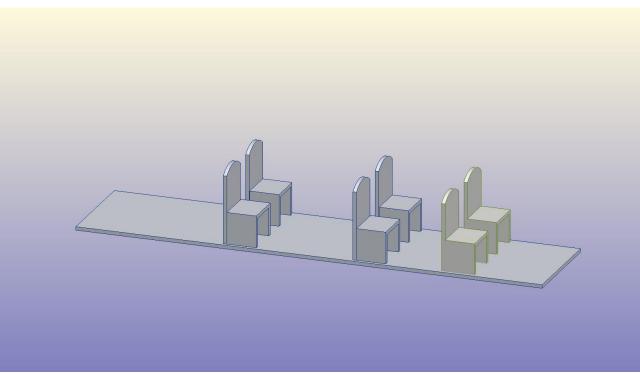
Now glue the seat tops into place



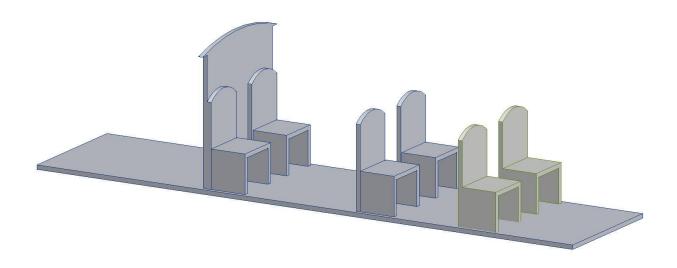
To assemble the loose chairs, glue the two seat supports onto a chair support.....



......Followed by the seat top. There are upto 4 seats in total.

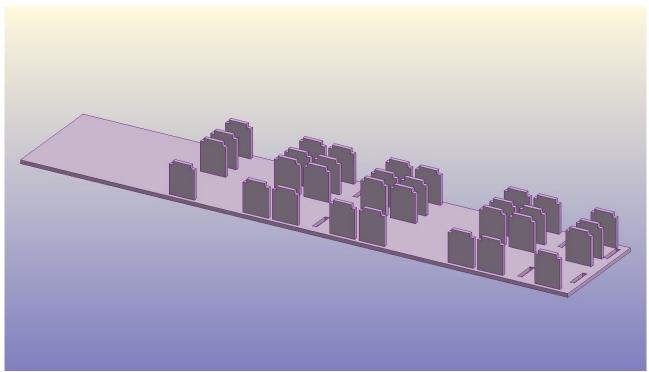


Glue the loose seats in any pattern you wish at the end of the coach.

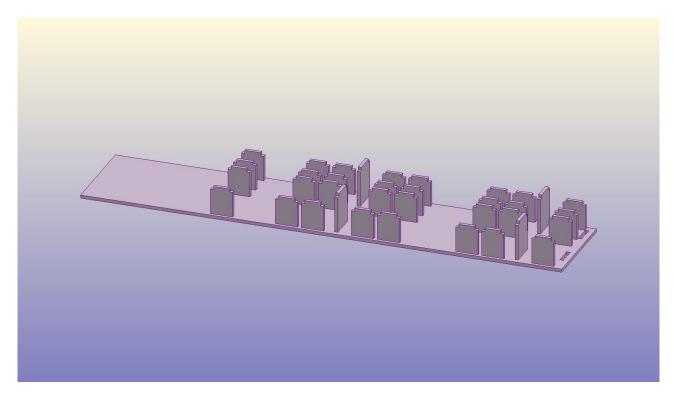


To complete the interior, glue in the internal partition into place at the end of the seating area.

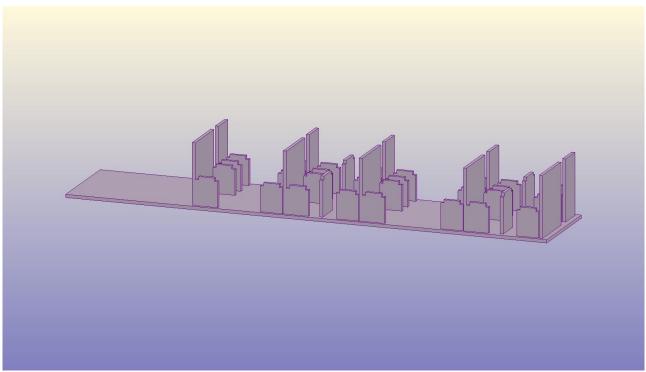
## VAN 5 ONLY



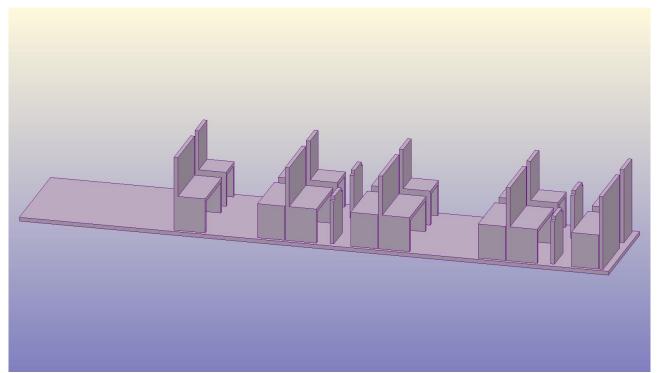
Start by gluing the seat supports into their slots on the chassis plate. These are the smaller of the similarly shaped components (the larger ones are the table supports).



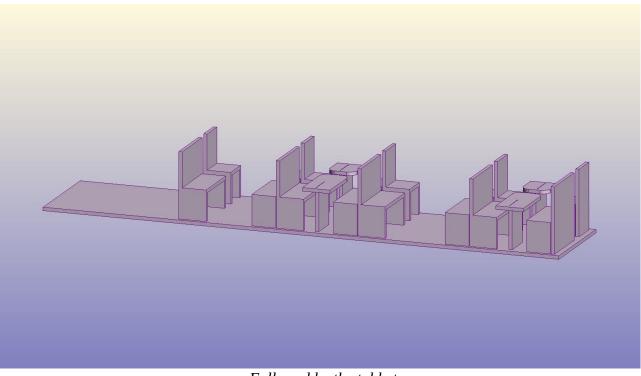
*Next, glue in the table supports. These are the larger of the similarly shaped components (the smaller ones are the seat supports).* 



Next, glue in the seat backs into their slots on the chassis plate. These will slot between the seat supports where there is a group of 4 supports together.

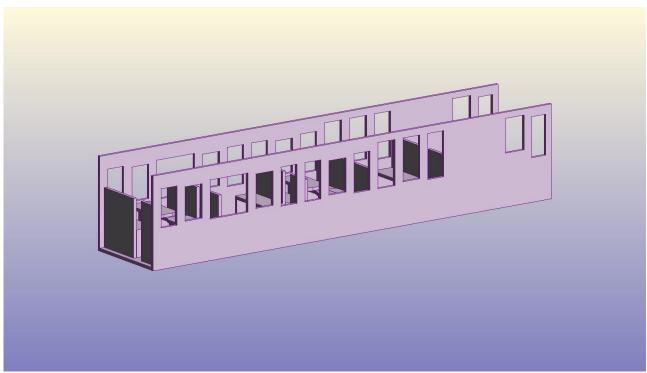


Now glue the seat tops into place......

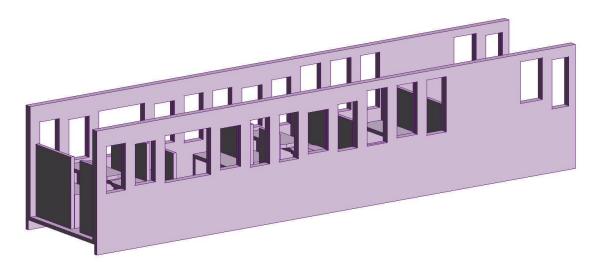


.....Followed by the table tops.

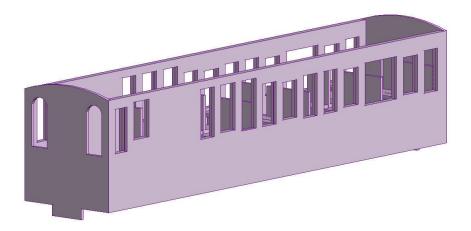
## All Coaches



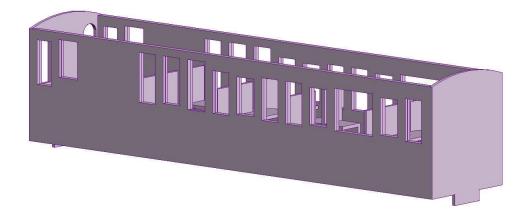
To start assembling the main body, glue the inner layer of the body side onto the lip between the side of the tables/seats and the edge of the chassis plate. For reference, these are the shorter of the four main body sides.

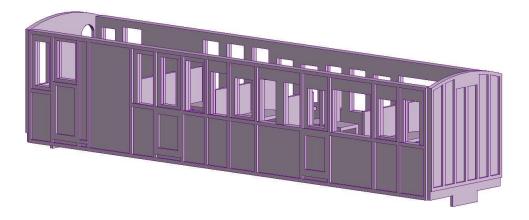


Then glue over the top, the outer layers. These can also be distinguished by having the etched detail for the beading on them.

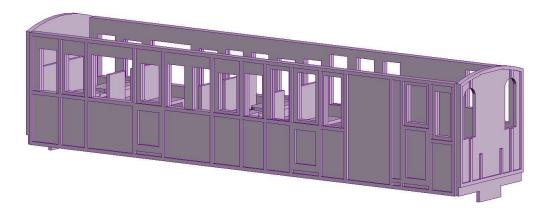


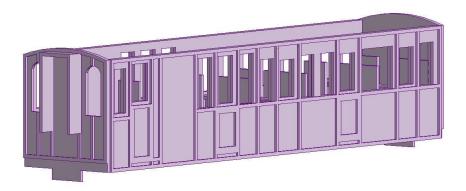
Now, glue on the ends of the coach. These sit on the very ends of the models and the top left/right hand corners will line up with the corners on the body sides.



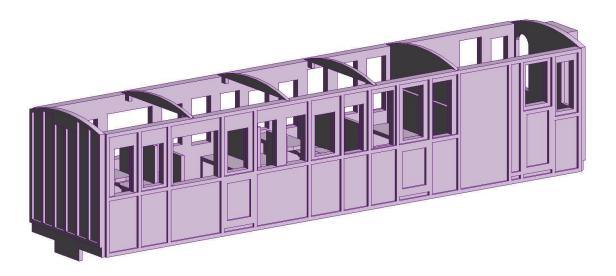


Now its time to glue on the beading. To aid you, there is etched markings on the sides and ends of the coach to show you where they go.

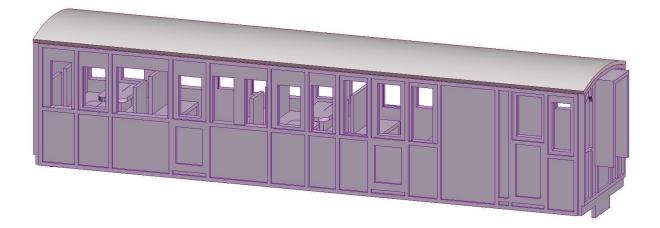




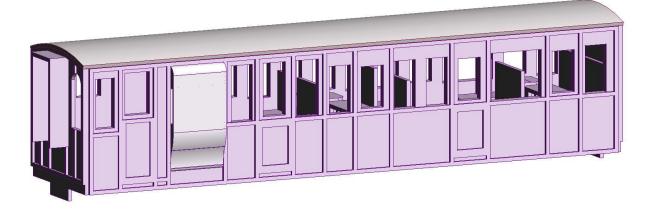
Next, glue in the Corridor Connectors again using the etched marks on the coach end as a guide.



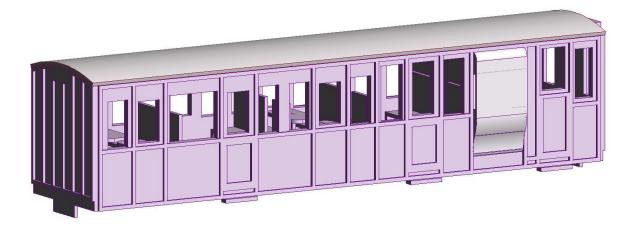
Before installing the roof, a small number of roof supports need to be glued into place. Where you place these is your choice but we recommend placing them equally along the roof



The roof itself is formed of long thin planks of wood which overlap the ends of the coach to cover the entire coach including beading. To cover the roof, we recommend either craft paper, a old shirt/sheet or masking tape all of which once painted give the perfect effect of canvas as well as smoothening the roof's curve.



To complete the body, glue the onto the bottom of the coach. These line up with the doors on the sides of the coaches.



Also, glue on the duckets onto the side of the coach into their slots. These sit at the top of these slots as marked by the etched lines on the body.

To complete your model, glue the couplings onto the end of the coach at your preferred height and mount the bogies using the mounts provided. We recommend placing them 90mm from the end of your coach.

Your kit is now complete.



We hope you enjoy your Bowaters Models kit! If you have any questions, don't hesitate to contact us on info@bowatersmodels.co.uk

We thank you for your custom.