



# modern light box

You can add a special atmosphere to every room, even using artificial light. Our wall-mounted light box is a brilliant example of how to give your rooms an exclusive touch. What's more, you can display small items in the two illuminated rectangular compartments contained in the light object.

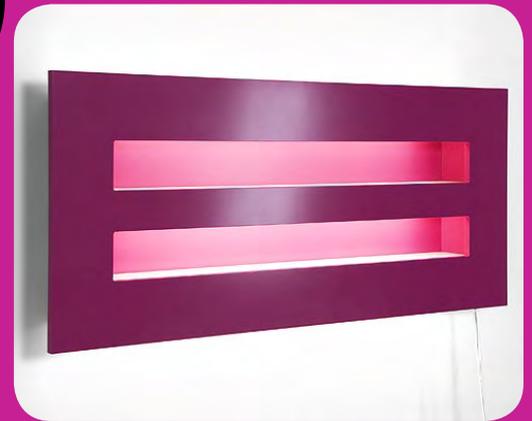
some diy knowledge required

## You will need:

19mm PG Bison Supawood  
Dowel template and marking points  
8mm wooden dowels  
Countersink bit  
Wood glue, cloth, clamp clips  
Sanding paper -120 – 240-grit  
Folding rule, soft pencil, rubber, pencil sharpener  
Roller for applying base coat, primer  
Rust-Oleum Spray Paint  
Putty or wood putty  
TOOLS: Jigsaw, sander, drill, cordless screwdriver, router (optional)

## Here's how:

1. To cut shelf openings in the front panel use a pencil to draw the outlines of openings in front panel. Then use a drill and 10 mm wood drill bit to bore a hole in each corner so that the edge of the drilled hole only barely touches the pencil lines, but does not intersect with them.
2. Insert jigsaw blade into one of the holes. Cut out the opening along pencil line from one hole to the next. If you have a router with a parallel guide, you can also use this to complete the cutouts.
3. Place the front panel on the rear panel exactly as the pieces will be positioned once fully assembled. Use a pencil to copy the outlines of front panel cutouts on rear panel. Remove the front panel again.
4. In pencil, draw a line 8 mm below cutouts on back of front panel and front of rear panel. Make five holes measuring 10 mm in depth along each of these four



lines, following the distancing intervals in the illustration. You will use these holes later to mount the shelf supports for the perspex bases. The hole diameter is determined by the type of shelf supports used. Please note: Do not drill all the way through! Ideally, you should use a depth stop.

5. Drill dowel holes in front panel sides and front panel. Since screw holes would disfigure the front panel, use wood glue and dowels for the joints. (If you plan to paint the front panel in colour anyway, you can also fasten the front panel sides from the front with screws). The holes will then be concealed by wood filler and paint. Position the front panel sides on the back of the front panel where you want to mount them. Use a pencil to mark the outlines and positions.

In the case of corner or T-joints, we strongly recommend using a drill template and marking points, or dowel templates as they are known. Measurements and markings alone will not be sufficient to position dowel holes precisely enough so that they lie exactly flush with each other.

6. Using a drill and 8mm wood drill bit, bore three dowel holes in the front edges of the front side panels. Copy the positions of the holes using dowel templates to the back of the front panel.

A drill template is a device that is attached to the workpiece by means of a screwing mechanism. This device guides the drill bit vertically through a metal collar directly into the wood.

A dowel template is a metal pin with marking point. You insert this pin into the holes on the front side so that you can transfer their positions. To do this, you press the predrilled workpiece precisely in position on the surface of its counterpart.

7. Glue the front panel and front panel sides together. Apply glue to the dowel holes and the gluing surfaces of the front panel sides and then insert the wooden dowels. Once you have also applied some glue to the holes in the front panel, join all the pieces together. Clamp the joints using clamp clips.

#### Important note:

Use clamp clips to press all of the glue joints carefully until the glue has dried. Refer to the manufacturer's instructions. While pressing the joints, use pieces of scrap wood as buffer blocks to distribute the pressure evenly and avoid leaving unsightly pressure marks on the workpieces. Wipe away any excess glue immediately with a damp cloth.



#### Dowel tips

Use a wood drill bit to drill holes with the dowel radius into the two pieces that you want to join. The two drilling depths should amount to the dowel length plus 2 mm. For this reason, you should ideally use a drill bit with a centring tip and a depth stop: the latter is a locating stop ring with a setscrew that is fixed to the required drilling depth on the drill bit.

Never drill a hole that is deeper than two thirds of the material thickness.

- Now lie the front section of the light box on its display side. Using a cordless screwdriver and flat head screws (2.4 x 16 mm), fit the two lower lights below the cutouts and rows of boreholes. Fit the third light in the same way above the top cutout.

While fitting the lights, make sure that all cables are laid in the same direction. You can then guide them downwards through the opening between the perspex base and front side panel and connect them there to a triple plug. This plug is then fitted in turn to the back of the front panel. As a result, you only require one cable to supply electricity to the light object.

- Connect the rear panel to its (slightly narrower) sides so that these are flush with the outer edges at the front. All you need for assembly in this case are flat head screws (4 x 50 mm) since the overlapping front panel will conceal these from view. Pre-drill the screw holes in the rear panel. Countersink these holes so that the screw heads are flush with the surface.
- Now fix the rear panel section of the light box to the wall. To do this, use a drill and 8mm wood drill bit to pre-drill the rear panel. Do not forget to countersink the holes. Make sure that the two suspension holes are at the same height.

Copy the positions of the boreholes to the wall. Use a **Bosch PDO Detector** to ensure that there are no lines or cables in that particular part of the wall.

- Depending on the wall construction, use a drill or rotary hammer and 6 mm masonry drill bit to drill holes in the wall, then extract the dust and insert the fixings. Screw in the appropriate screws with the cordless screwdriver.
- You can now slide the front section onto the rear panel structure: this job should ideally be carried out by two people. Move the front section to the correct height and screw it in place with the cordless screwdriver and flat head screws (4 x 35 mm) through the pre-drilled holes. Refer to the tip above about screwing together two pieces of wood.
- Fill in any screw holes with wood filler. Once dry, sand the area smooth using 120-grit sandpaper.

Apply a primer of **Prominent Premium Matt** (white) to the surfaces, and once dry lightly sand with 400-grit sandpaper for an ultra-smooth finish.

The simplest solution for the perfect finish is to use **Rust-Oleum Painter's Touch Spray Paint**. Spray on 2 coats, allowing drying time between coats.

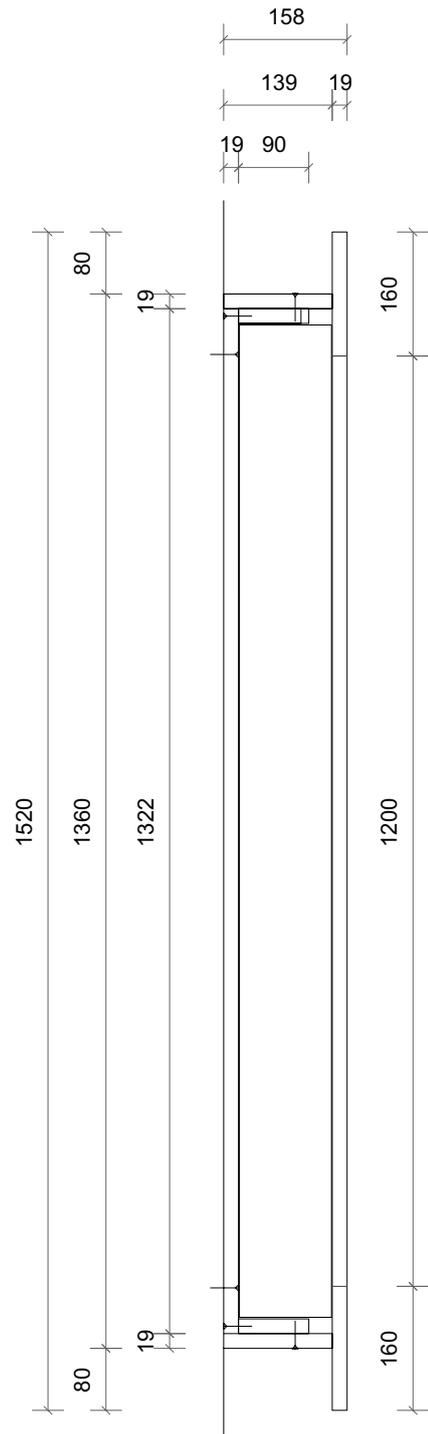
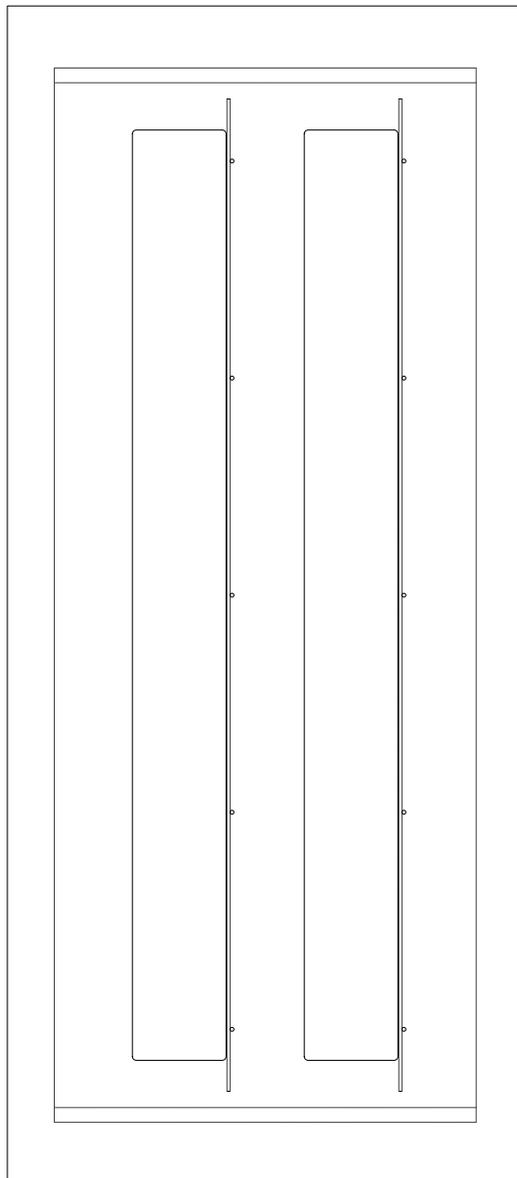
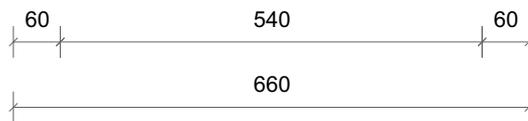
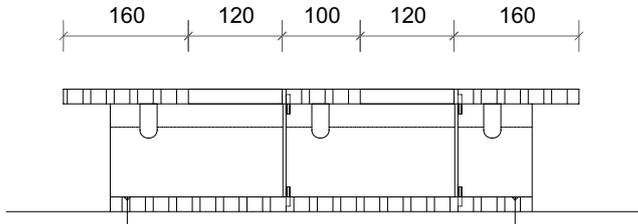
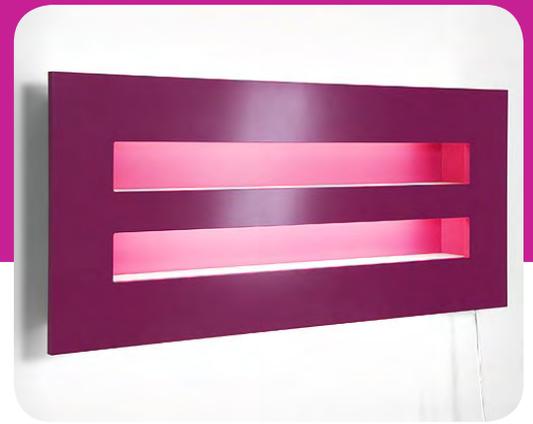


### Bosch PDO Detector

You should play it safe if you want to drill in walls: this handy digital detector from Bosch enables you to find live cables, pipes or girders and frames made of metal, as well as wooden substructures with the highest precision and safety.



# cutting diagram for lightbox



**PRINT OUT THIS PAGE FOR A CLEAR COPY**