## BOX-FRAME HEADBOARD

## CONSTRUCTION PLAN



Difficulty level: TT I MODERATE


## BOX-FRAME HEADBOARD

Sweet dreams in a well-defined space. The key to the successful layout of any large room lies in defining zones according to their use. That's exactly the effect achieved by this headboard. Forming a shallow recess which creates a cozy feel conducive to a good night's sleep, the headboard is made to look as if it is part of the wall. This effect is amplified by painting the back of the storage nooks the same colour as the wall and by adding small halogen lamps to the inside of the frame. Perfect for those who like to read in bed!

This headboard built from $5 / 8$ " MDF consists of two vertical box sections supporting two horizontal box sections. Three smaller boxes are inserted vertically between the two main horizontal sections, acting as dividers to create storage nooks. The structure measures 89" high by $133 / 8^{\prime \prime}$ deep and $1201 / 2^{\prime \prime}$ wide. The pieces used to make the widest (horizontal) sections of the headboard therefore need to be extended. All the parts should be glued and nailed together (or glued and screwed together, as the case may be).

## TOOLS AND MATERIALS NEEDED

## TOOLS

> Table saw
$>$ Sliding mitre saw
$>$ Pneumatic finishing nailer
> Driver drill
$>$ Punch (size according to make of recessed light fixture)
> Clamp
$>$ Measuring tape
$>$ Square
$>$ Pencil

## MATERIALS

$>4$ sheets MDF, $5 / 8^{\prime \prime} \times 48^{\prime \prime} \times 96 "$
$>18$-gauge $1 \frac{1}{2} 2^{\prime \prime}$ nails (for pneumatic nailer)
$>3$ wood strips, $3 / 4^{\prime \prime} \times 3 / 4^{\prime \prime} \times 96{ }^{\prime \prime}$
> 1" No. 8 screws
$>\quad 1 \frac{1}{2} 2^{\prime \prime}$ No. 6 screws
$>\quad$ Carpenter's glue
$>$ Filler or quick-drying no-sanding spackling compound
$>$ Paint
$>$ Halogen recessed lighting fixtures
> 3/4" squares


## BOX-FRAME HEADBOARD

## BEFORE ASSEMBLY

## CUTTING LIST

Mark each piece clearly with the corresponding letter before assembling. Sand the edges smooth as necessary.

Vertical box sections
MDF, 5/8" x 48" x 96"

| PIECES |  | QUANTITY | WIDTH (") | LENGTH (") |
| :--- | :--- | :--- | :--- | :--- |
| A | SIDE PANEL | 4 | $13^{3 / 8}$ | 89 |
| B | FRONT | 2 | 5 | 89 |
| C | BRACKET | 10 | $133 / 8$ | $3^{3 / 4}$ |


| D |
| :---: |
| D |
| D |
| F |

## Horizontal box sections

MDF, 5/8" x 48" x 96"

| PIECES |  | QUANTITY | WIDTH (") | L |
| :---: | :---: | :---: | :---: | :---: |
| D | PANEL | 4 | $13^{3 / 8}$ | 9 |
| E | PANEL EXTENSION | 4 | $13^{3 / 8}$ | 1 |
| F | FRONT | 2 | 5 | 9 |
| G | FRONT EXTENSION | 2 | 5 | 1 |
| H | BRACKET | 14 | $13^{3 / 8}$ | 3 |
| I | BRACE | 4 | $13^{3 / 8}$ | 5 |
| J | BRACE | 2 | 5 | 5 |
| Wood strips,3/4" x 3/4" x 96" |  |  |  |  |
| PIECES |  | QUANTITY | LENGTH (") |  |
| K | STRIP | 2 | 96 |  |
| L | STRIP | 2 | $14^{1 / 2}$ |  |

Box compartment dividers
MDF, 5 /8" x 48" x 96"

| PIECES |  | QUANTITY | WIDTH (") | LENGTH (") |
| :--- | :--- | :--- | :--- | :--- |
| M | SIDE | 6 | $10^{3 / 8}$ | 11 |
| N | TOP | 6 | $3^{7 / 8}$ | $10^{3 / 8}$ |
| O | FRONT | 3 | 5 | 11 |

Back panel
MDF, 5/8" x 48" x 96"

| PIECES |  | QUANTITY | WIDTH (") | LENGTH (") |
| :--- | :--- | :--- | :--- | :--- |
| P | BACK PANEL | 1 | 11 | 96 |
| Q | PANEL EXTENSION | 1 | 11 | $14^{1 / 2} 2$ |
| R | BRACE | 1 | 5 | 11 |



## BOX-FRAME HEADBOARD

## STEP-BY-STEP

## VERTICAL BOX SECTIONS

1 Glue and nail a bracket $C$ to each end of one of the side panels A, then install three other brackets at equal intervals.

2 Glue and nail another side panel A to this assembly to form a box.


3 Glue and nail in the front piece $B$ to close one of the sides of the box.

4 Build the second box in the same way.

## HORIZONTAL BOX SECTIONS



5 Attach an E extension to one end of each D panel by overlapping the joint between the two pieces E and D with a corresponding I brace, and gluing and screwing the brace in place with 1" screws. The extended panels and front are thus $1101 / 2$ " long.

6 Attach a G extension to one end of each $F$ front by overlapping the joint between the two pieces $G$ and $F$, and gluing and screwing the brace in place with 1" screws.

7 Glue and nail an H bracket to each end of one of the $1101 / 2^{\prime \prime}$ panels (E-D), then install five other H brackets at equal intervals.

8 Glue and nail another E-D panel onto this assembly to form a box. Make sure that panel braces I and J are on the inside of this box.

9 Glue and nail in the front G-F to close one of the sides of the box.
(10) Build the second box in the same way.

11 On one side of each horizontal section, nail a wood strip K and a wood strip L end to end (to make 110 1/2"), $23 / 8^{\prime \prime}$ from the back edge.


## BOX-FRAME HEADBOARD

## STEP-BY-STEP (CONTD)

## COMPARTMENT DIVIDERS

12 Make three boxes by fastening sides $M$ between tops $N$, then attaching a front O to each.

## BACK PANEL

13 Fasten the $Q$ extension to one end of the $P$ panel by overlapping the joint with the $R$ brace. Centre the brace vertically over the joint of $Q$ and $P$, and glue and screw into the panel.


## ASSEMBLY

The headboard is much easier to assemble if it is placed upside down.

14
Lay a horizontal box section flat on the ground, with the wood strip K-L face up. Stand the vertical box sections up on either side of the horizontal section, making sure that all the fronts are facing the same way. Hold the boxes together with clamps, then screw them together from the inside ( $1^{\prime \prime}$ screws). Have someone help you hold the vertical sections upright as you do this.

15 Push the back panel Q-P up against the wood strip and screw it in place through the back of the strip (drill pilot holes in the strip first).


16 Arrange the three compartment dividers along the horizontal section, spacing them $23 \mathrm{z} / \mathrm{s}^{\prime \prime}$ apart and pushing them up against the back panel. Glue and screw in place from the back (drill pilot holes first and use $11 / 2^{\prime \prime}$ screws).

17 Lay the second horizontal section, with the wood strip face down, on top of the three box dividers. Make sure the back panel is resting against the wood strip, then screw in place from the back. Screw the second horizontal section to the vertical sections from the inside.

18 Bore holes at regular intervals through the bottom of the lower horizontal section in order to insert the halogen lights. Drill holes in the various inner surfaces to feed the wires through.

19 Conceal all the joints with filler or quick-drying no-sanding spackling compound.

## FINISHING

Fasten the headboard to the wall studs using three $3 / 4$ " squares as a guide. Paint the headboard the same colour as the surrounding wall, and paint the inside of the compartments as well as the inner portion of wall another colour, to heighten the impression that the headboard is part of the wall.

