

## 2.11 Application of panels in architectural mouldings and window boards

### 2.11.1 Selection of panels for mouldings and window boards

The selection of wood-based panels for mouldings and window boards depends on a number of factors of which the most important are:-

- good machining properties of the panel which are a reflection of the evenness and fineness of its texture
- resistance to ambient moisture conditions which, in the case of newbuild, means resistance to high levels of humidity or actual condensation as the building dries out. Window boards may have to resist the effects of condensation running off the windows long after the building has dried out
- moderate to high levels of resistance to abrasion which can be met using panels with moderate to high levels of density.

The selection of panels for mouldings and window boards which satisfy the above requirements is set out in Table 2.16: the choice is somewhat limited. Their use in window boards is illustrated in Figure 2.27.



**Figure 2.27 Use of wood-based panels as windowboards**

### **2.11.2 Conditioning**

It is important in order to prevent buckling of mouldings and window boards, or the development of gaps between sections, that mouldings and window boards are installed at a moisture content close to that which they will achieve in service. Advice on the conditioning of boards and products cut from these boards, is to be found in Section 4.2.

### **2.11.3 Fixing**

It is strongly recommended that mouldings and even window boards should be fixed with adhesive: nailing should not be adopted. Some prefinished mouldings have an integral clip fixing system.

### **2.11.4 Finishes for mouldings and window boards**

Mouldings and window boards are available with various factory applied finishes.

When unfinished mouldings and window boards are used they can be decorated with conventional paints and stains taking care that the appropriate alkali resistant primer is used on cement bonded particleboard.

As with all painted surfaces, preparation, priming and protection from water ingress are important for the successful application and long-term performance of finishes applied to wood-based panels.

**TABLE 2.16 PANEL GRADES\* FOR ARCHITECTURAL MOULDINGS AND WINDOW BOARDS**



	CONDITION	PLYWOOD EN 636	PARTICLEBOARD EN 312	OSB EN 300	MDF EN 622-5	FIBREBOARD EN 622-3,4	CBPB EN 634
<b>Mouldings</b>	new build	636-2	-	-	MDF.H	-	CBPB
	dry refurbishment	636-1	-	-	MDF	-	CBPB
<b>Window boards</b>	new and refurbishment	636-2	-	-	MDF.H	-	CBPB

\* The table provides the minimum grade of panel that satisfies the particular set of requirements: panels of higher quality may be substituted, and their selection may result in a reduction in required thickness.

Although all the panels meeting the grade specifications will satisfy a particular set of requirements, the level of performance of different brands of these panels may vary considerably, some may even be endowed with high levels of properties not directly covered by the table.