Protection of finished surfaces prior to handover

As per the perceived value matrix, finishing is the most important element for the customer w.r.t his/her perception of the product. However, it has been observed that while we spend huge amounts of money on finishing materials, they are poorly stored, handled, fixed and protected (post-fixing) leading to significant deterioration in their appearance/functionality and causing customer dissatisfaction.

All project managers are to take special efforts and care to ensure that the finished product is protected such that no damage occurs to any finished surface from follow-up trades which are working within the finished area. Also Procurement is to ensure that the contract is structured in a manner which makes the contractor responsible for the proper fixing of the protective materials (material may be provided by Lodha or the contractor, based on terms agreed in the contract).

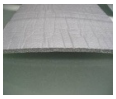
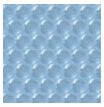
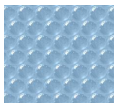
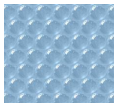
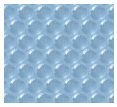
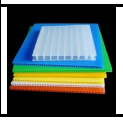
Material/Surface	Key Measures to be taken to Protect / Prevent Damage
Any Hard (Stone / Vitrified Tile / Palladio etc.) Flooring	Once material is laid and pre-final polishing (if applicable) is completed, entire surface should be covered with protective covering (bubble paper, plastic sheet, _____) which covers the entire surface. Special care to be taken that the pasting material is strong (eg. electrical tape) and entire surface is covered. Covering to be removed only after final coat of painting if completed. This is also applicable to flooring works on any horizontal surface even in external areas.
Wooden Flooring	To be paid only after final coat of painting is completed. If laid prior to final coat of painting, follow protection as underlined portion above.
Door Frames	Follow protection as underlined portion above.
Doors	Follow protection as underlined portion above.
Window frames	Follow protection as underlined portion above.
Window Glass / Glass Partitions	Follow protection as underlined portion above.
Mirrors	Follow protection as underlined portion above.
Walls	Final coat of painting to be done only after customer takes possession.
Sanitary Ware	Follow protection as underlined portion above.
Modular Kitchen (including platform) & Modular Wardrobes	To be installed only once all works in kitchen (flooring, tiling, painting, electrical etc.) are 100% completed. Follow protection as underlined portion above.
CP Fittings, loose furniture, curtains and other high value visible user interfaces (VDP, HA panel, any appliances etc.)	Not to be installed till customer takes possession. Once installed, follow protection as underlined portion above.

Table 1

In addition to the above, the contractor and the Const Mgmt team need to be aware of the fact that protection is the key to ensuring a high value of finishing and hence, all practical measures needed to reasonably protect the materials need to be taken.

Category Wise Protective Material Usage:

For the various categories of the completed finishing work, following is the list of the protective materials that must be used accordingly; no other usage will be permitted.

Category Name	Product Name	Product Description	Images	Sizes	Indicative Prices (INR/Sq.ft)
Marble/ Engineered and Hard Wood Flooring	Flute Board ***(Option 1)***	Extruded polypropylene sheet with flutes running across the length to provide cushioning effect		3mm	7.60
	Floor Guard ***(Option 2)***	Polymer based 5 layered bounded system		5mm	7.72
Laminated Flooring/Vitrified/Ceramic Tiles	Bubble Sheet	Plastic sheet with air bubbles for protection		Bubble Dia. 30 mm (550 Gauge)	1.76
Door Frames	Floor Guard ***(Option 1)***	Polymer based 5 layered bounded system		3mm	7.21
	Non-Woven fabric with plastic laminate ***(Option 2)***	Self-adhesive Protective Nonwoven, sturdy protection foil, liquid barrier		3mm	8.5
Shutters Window frames Window Glass / Glass Partitions/Mirrors	The supplier will be responsible for providing the protective coating against scratches, dust and dirt				
Sanitary Ware	Bubble Sheet	Plastic sheet with air bubbles for protection		Bubble Dia. 20 mm (550 Gauge)	1.76
Modular Kitchen (including platform) & Modular Wardrobes	Bubble Sheet	Plastic sheet with air bubbles for protection		Bubble Dia. 20 mm (550 Gauge)	1.76
CP Fittings, loose furniture, Electronic Appliances and other high value visible user interfaces (VDP, HA panel, any appliances etc.)	Bubble Sheet	Plastic sheet with air bubbles for protection		Bubble Dia. 20 mm (550 Gauge)	1.76
Lift Cabins	Flute Board	Extruded polypropylene sheet with flutes running across the length to provide cushioning effect		3mm	7.60

		on the floor, ceiling and sides. Doors are to be pre-protected by the vendor.			

Table 2

*** Wherever there are options provided under product name, the preferred option is indicated.**

In the mentioned list of the protective materials, few materials like **Floor Guard, Flute Board and Non-Woven Fabric with plastic laminate can be reused at-least once for protection**. These materials must be removed with care and stored under proper conditions so that they can be re-used whenever and wherever required.

- Transparent self adhesive BOPP Tape (72mm wide) should be used for jointing the protective material. Tentative price is INR 0.65 per metre
- All bubble sheets should be layed upside down with the bubbles placed against the material.

Responsibility Matrix:

The below matrix depicts the responsibility of buying the protective material, installation/laying of the protective material and removal of the protective material post completion of the construction activities.

Category Name (Protective Material reqd. for:)	Who will Buy?	Who Will install?	Who will remove?
Marble/ Engineered and Hard Wood Flooring	Lodha	Contractor who has been given the job of installation of the relevant material/equipment.	Lodha FM Team
Laminated Flooring/Vitrified/Ceramic Tiles	Lodha		Customer
Door Frames	Lodha		Lodha FM Team
Shutters	Supplier		Customer
Window frames	Supplier		Customer
Window Glass / Glass Partitions/Mirrors	Supplier		Customer
Sanitary Ware	Lodha		Customer
Modular Kitchen (including platform) & Modular Wardrobes	Lodha		Customer
CP Fittings, loose furniture, Electronic Appliances and other high value visible user interfaces (VDP, HA panel, any appliances etc.)	Lodha		Customer
Lift Cabins	Lodha (doors by vendor)		Lodha FM Team

Table 3

- In the case of the Shutters, Window frames, Window Glass, Glass Partitions and Mirrors, the supplier will be responsible for providing the protective coating against scratches, dust and dirt. **This clause must be added in all the contracts done with the suppliers related to mentioned categories and should be made effective for all new orders to be placed 1st Jan'12 onwards.**

- In rest of the categories Lodha will buy the protective material and provide the same to installing contractor. The installation responsibility should be put in the scope of the concerned contractors who are otherwise installing that material/equipment.

- The installation of the protection material will be under the scope of the contractor installing these finishing materials. Project team to ensure that the protective material is used as per the specifications provided in Table 2.

- Categories where FM is responsible for the material removal, FM team must ensure the safe removal and storage of protective material as the same will be reused as per the future requirements. In rest all categories, the customer will be responsible for removing the protective material post possession of the flat.