

# NBS M50 KarEbinR™, Kleen, KORE & Kolour Wall Cladding (2.5mm PVC Wall Cladding Sheet)

TYPE(S) OF COVERING PVC LININGS TO WALLS:

Project: Location: Substrate:

Sheet: Extruded semi-rigid PVC sheet, EU Grade

Maximum service temp: 60°C

Fire rating: EN13501-1 B-s2, d0

Manufacturer / Product reference:

hy-plast KarEbinR™ Kleen

hy-plast KarEbinR™ KORE hy-plast KarEbinR™ KORUr

hygienic wall cladding by hy-plast Limited,

telephone: +44(0) 113 532 5355, email: sales@hy-plast.co.uk

Width: 1220 mm

**Length:** 2500 mm or 3000 mm

Thickness: 2.5 mm Surface finish: Satin

Colour: Kleen (White) and various for Kore & Kolours

**Light reflectance value:** 

Adhesive: KarEbinR Foil, KarEbinR Bond or One Part

Joints: One part, Two part or weld

Please be aware changes and substitutions to the recommended installation of the system will null and void the fire certification as tested

## **GENERAL**

## 210 WORKMANSHIP GENERALLY:

All substrates must be rigid, dry, sound, smooth and free from contaminants before coverings are applied.

Finished coverings must be accurately fitted, jointed as per manufacturer's instructions, securely bonded, smooth and free from air bubbles, rippling, adhesive marks and stains.

#### 251 LAYOUT:

Map out sheet coverings to keep dividers to a minimum.

Internal and external corners can be thermoformed onsite; to limit the number of dividers required.

#### 310 MARKING:

Ensure that materials are delivered to site in original packing, clearly marked with batch number.

# 320 STORAGE:

Store materials in a clean, warm, dry, well-ventilated place. Keep products in original packaging until conditioning commences.



Materials should not be laid out until; building is weather proofed, wet trades have completed their work, building is well dried out (internally), all paintworks are finished and dry, conflicting overhead work is finished, and service outlets, duct covers and other fixtures around which the materials are to be cut have been fitted.

#### 340 CONDITIONING:

Sheets to be stored flat, fully supported and left for 24 hours to attain the ambient room temperature prior to installation (min 14°C).

## 350 Environment: General

Before during and after installation, provide adequate ventilation and maintain temperature and humidity at approximate levels that will be present after the building is occupied.

## 350 Environment: Heat

Areas subject to high temperatures should comply with the following:

KarEbinR panels should not be exposed to temperatures above 60°C.

Before the testing of Kitchen equipment that will produce and expel severe heat; extraction systems must be operational. Failure to do so may result in expansion issues.

In all areas exposed to high temperatures hy-plast recommends the substrate or dry wall lining should be constructed using a Calcium Silica board. Then stainless-steel panels should be used to clad these areas (direct heat above 60°C) — set at a minimum distance of 300mm from the direct heat source.

Hot and (or) steam pipes should be insulated with a 3-5mm expansion gap created; when installing panels around the pipes.

## **PREPARING SUBSTRATES**

SUITABILITY OF NEW SUBSTRATES AND CONDITIONS: The suitability of the substrates and appropriate area conditions are joint responsibility of the Main Contractor and Subcontractor

## 420 SUITABILITY OF EXISTING SUBSTRATES AND CONDITIONS:

Before commencement of work the subcontractor must confirm with the Main Contractor that the existing substrates will (after the specified preparation) be suitable to receive the specified coverings. Any fitting of coverings, should also be taken as acceptance that the substrate and conditions within the given areas are acceptable

DAMPNESS: When new wall linings are to be a wet-laid: The substrates must be dried to minimum of 16% WME (Wood Moisture Equivalent) on Protimeter - Surveymaster equipment or similar. Readings should be conducted in all corners, edges, and at various points over the general area being tested

# 440 SUITABLE SUBSTRATES: GENERAL

The specifications for finishes to receive PVC wall cladding will require:

Bare faced brick or blockwork must be well aligned with joints flush. System can only accommodate for a 3mm over a 2m straight edge tolerance

12.5mm thick plasterboard (do not seal board as done for decorating). If plaster wall requires fire protection; ensure all joints between plasterboard sheets need to be filled with appropriate fillers

Sand & cement rendering 1:3 to steel trowel finish

Minimum 9mm W.B.P. (Weather & Boil Proof) resin bonded plywood fixed at 200mm centers to suitable studwork or direct to solid substrate

Minimum 9mm MDF panels fixed at 200mm centers to suitable studwork, or direct to solid substrate



Ceramic tiles which are clean (degreased) and securely bonded to substrate

Sound painted surfaces can be used (an adhesive test is advisable to ascertain acceptability) Plastered surfaces - finished with steel trowel. Pink lightweight plasters are not normally considered acceptable (primarily due to product strength)

Porous surfaces are required to be thoroughly sealed with diluted PVA applied to the surface face 12 hours prior to the installation. A 1:10 dilution is the standard recommendation

#### 440A SUITABLE SUBSTRATES - WELDED FINISH:

Surface must be straight to 3mm over a 2m straight edge

12.5mm thick plasterboard (do not seal board as done for decorating). If plaster wall requires fire protection; ensure all joints between plasterboard sheets need to be filled with appropriate fillers

Sand & cement rendering 1:3 to steel trowel finish

Minimum 9mm W.B.P. (Weather & Boil Proof) resin bonded plywood fixed at 200mm centers to suitable studwork or direct to solid substrate

Minimum 9mm MDF panels fixed at 200mm centers to suitable studwork, or direct to solid substrate

Ceramic tiles which are clean (degreased) and securely bonded to substrate. Tiles must be level without any raised edges

Sound painted surfaces can be used (an adhesive test is advisable to ascertain acceptability) Plastered surfaces - finished with steel trowel. Pink lightweight plasters are not normally considered acceptable (primarily due to product strength)

Porous surfaces are required to be thoroughly sealed with diluted PVA applied to the surface face 12 hours prior to the installation. A 1:10 dilution is the standard recommendation

# 470 SUBSTRATE PREPARATION - EXISTING WALL FINISH TO BE REMOVED:

Loose paint and dust to be removed.

Dusty frail surfaces should be removed or made sound

(Please consult hy-plast regarding approved sealing treatments)

Make good as required by patching or filling with repair mortar or sand and cement with Everbuild PVA Bond (or similar) mix, to give a smooth, even surface

Surface must be straight to 3mm over a 2m straight edge

# 480 EXISTING WALL FINISH TO BE OVERLAID:

Make good as required by patching or filling with repair mortar or sand and cement with Everbuild PVA Bond (or similar) mix, to give a smooth, even surface

Ceramic tiles should be degreased, and then rinsed with clean water and allowed to dry. It is recommended that the tiles are then abraded with a diamond disc and all the dust removed. All loose tiles should be removed, and the void area made good using Everbuild Febset 45 (or similar) repair mortar or sand and cement with Everbuild PVA Bond (or similar) mix, if drying time allows. Alternatively, a suitably thick WBP plywood, screwed and plugged, (maximum 200mm centers) could be used.

## **FITTING COVERINGS**

# 640 ADHESIVE FIXING GENERALLY:

Adhesive should not be stored at temperatures below 5°C.

Recommended ambient temperature of 14°C / 57°F for all installation areas.

Back of sheets should be cleaned prior to applying adhesive.

KarEbinR Bond adhesive should be applied with the recommended (5mm) notched trowel Once sheet is applied to wall, the front of the sheet should be evenly pressured with a suitable roller to entire surface area of the panel. This will ensure adequate adhesive transfer and a good bond.

Use KarEbinR double sided tape Ref FDST40 (for welded system) as support whilst adhesive



cures.

## 641A ADHESIVE FIXING – KarEbinR Bond:

Use KarEbinR Bond two-part polyurethane adhesive spread with a 5mm square notched trowel On application immediately apply sheet to the wall. Adhesive cures in approximately 3-5 hours (full cure 24 hours).

#### 641B ADHESIVE FIXING – One Part

The One Part adhesive is only suitable for porous surfaces. Apply One Part water based synthetic polymer adhesive to the back of the sheet using a 3mm deep x 5mm wide square notched trowel. Once applied immediately apply the sheet to the wall. The panel should be supported by double sided tape (FDST40 on welded system) whilst the adhesive cures. Upon completion, the installation should not be subject to an increase in ambient temperature above 30°C (until the adhesive is fully cured).

# 641C ADHESIVE FIXING – KarEbinR 600ml (FL-600) or 305ml (FL-305) Foil:

There are two different methods to apply the KarEbinR 600ml (FL-600) foil synthetic hybrid polymer adhesive. The adhesive can be applied manually to the back of the sheet using a 3mm deep x 5mm wide square notched trowel. Alternatively, the adhesive can be gunned onto the wall either direct or to the sheet using a battery-operated Makita DCG1807BK gun (or similar) or an equivalent hand operated cartridge holding gun. Please contact hy-plast direct if further information is required

On application immediately apply sheet to the wall.

Support the panel with double sided tape (Ref: FDST40 on welded system only) whilst adhesive cures. (can be 24hours plus)

Once installed the site conditions should not be subject to an increase in ambient temperature of more than 30°C until the adhesive is fully cured. Full cure will be dependent on absorbency of substrate.

#### 680 SEAM WELDING COVERINGS:

To allow for conditioning and settling - do not proceed with welding of the panels until a minimum of 24 hours after initial install or until adhesive has completely set.

Use KarEbinR double sided tape (FDST40) applied to the wall spanning the joint to be welded. Bring the edges of the sheets to be welded close together leaving a 1.5mm - 2mm gap between the sheets. Hot weld using hot air welding gun and the appropriate KarEbinR welding rod. Once joint cools cut off excess weld rod flush with the sheet face to form a neat, smooth, strong joint. Recommended tool is Mozart trimming knife (or similar).

#### 731 SEALANT:

KarEbinR silicone sealant (Ref: S305-KL white or S305 colour coded reference) contact hy-plast Limited, telephone +44(0) 0113 532 5355, email sales@hy-plast.co.uk

## 740 EDGINGS/COVER STRIPS: KarEbinR PVC DIVIDERS

All joints should be covered using PVC 'H' joint sections (Ref: DT two-part divider or DT1 one part divider).

Internal/external corners: KarEbinR to be thermoformed on-site as needed, this limits the number of dividers required.

For vulnerable external corners it is recommended that these are over-clad with stainless steel corner protectors, to a height of 1200mm.

# 740B EDGINGS/COVER STRIPS: KarEbinR Silicone Joint

Form a flush joint using a 3-4mm bead of KarEbinR silicone sealant. (Ref: S305-KL white or S305 + relevant colour code).

Internal/external corners: KarEbinR to be thermoformed on-site as needed, this limits the



number of dividers required.

For vulnerable external corners it is recommended that these are over-clad with stainless steel corner protectors, to a height of 1200mm.

740C EDGINGS/COVER STRIPS: ACCESSORIES

PVC single or two-part edge trim (Ref: colour ref - ET- two part or -ET1 single + length)

#### 773 ABUTMENTS: GENERAL

To window frame, door frames, architraves, ceiling & quarry tile - seal with KarEbinR silicone sealant (Ref: S305-KL white or S305 + relevant colour code).

See KarEbinR detail drawings W1, W2 and WF3.

#### 773A ABUTMENTS: TREATMENT TO SERVICE PREPARATIONS

Any holes to be cut should allow 3-4mm silicone seal around all permeations. Seal with KarEbinR silicone sealant (Ref: S305-KL white or S305 + relevant colour code).

# 773B ABUTMENTS: PVC FLOORING

PVC floor with coved skirting - joint to be covered with divider trim (Ref: colour ref - DT- two part + length or colour ref-DT1 single + length)

Ask hy-plast Ltd for Vinyl (Dry) drawing

PVC floor with coved skirting overlapped by 50mm with KarEbinR Ask for hy-plast Ltd Overlap Detail drawing

If required contact hy-plast for more detailed information.

## 773C ABUTMENTS: PVC FLOORING, SHOWER/WET AREAS

PVC floor with coved skirting overlapped by 50mm with KarEbinR, seal bottom of sheet with clear silicone (Ref: S305-CL).

Ask hy-plast Ltd for Overlap Detail drawing

#### 773D ABUTMENTS: RESIN FLOORING:

Resin flooring with coved skirting, seal bottom of sheet with single part PVC edge trim section (Ref: Colour + ET1 + Length)

# Ask for hy-plast Ltd Wall to Resin Floor drawing

Alternatively cove resin skirting feather out to nothing overlap by minimum 50mm with KarEbinR seal out bottom edge of sheet with KarEbinR clear silicone sealant (Ref S305-CL).

## 773E ABUTMENTS: TO SHOWER TRAY

Use KarEbinR Sheet bedded onto wall and shower tray with KarEbinR Bond or KarEbinR Foil adhesive (Ref: B-65 or FL600) and seal with relevant KarEbinR seal (Ref SR290 – colour ref) Ask for hy-plast Ltd Shower Tray drawing

# 773F ABUTMENTS: TO SHOWER TRAY WITH INTEGRAL UPSTAND.

Apply KarEbinR over upstand ensuring the sheet adhered to the upstand leaving a 3mm gap inbetween bottom of sheet and shower tray. Seal with KarEbinR Silicone sealant (Ref: S305-KL white or S305 + relevant colour code).

## **COMPLETION**

#### 810 CLEANING GENERALLY:

Remove any existing contaminants (e.g. - dust and dirt). Carefully remove any adhesive or other marks from coverings and adjoining surfaces, using approved cleaning agents and methods. During cleaning of the KarEbinR surface, the temperature must not exceed 60°C. Do not use cleaning materials of an abrasive nature

Contact: hy-plast for detailed cleaning instructions:



hy-plast Limited, tel: +44(0) 113 532 5355 email: sales@hy-plast.co.uk

# 821 FINISHING PVC WALL CLADDING:

Protective films should be removed. All surfaces must be dry then, apply antistatic solution or wipe down with antistatic wipes to all surfaces

PROTECTION: If necessary, tape and (or) appropriate protective material to sheet must ensure it is compliant to surface spread of flame requirements, as per Building Regulations.