# E-FENDER
# FIXING INSTRUCTIONS

YEOMAN SHIELD
WALL & DOOR PROTECTION

**Yeoman Shield products should be installed in accordance with the following manufacturers recommended instructions.**

E-Fender is generally supplied in 3.5m lengths for site cutting, drilling and fixing. However, we can offer a cutting service if required.

Where appropriate, measure and cut the fender to the required length using a hacksaw or electric drop saw, in conjunction with an oil based lubricant, ensuring that all ends are cut square.

Mark the pre-determined height of the fender on the surface to be protected, preferably using a laser level.

Pre-drill the fender at maximum 375mm centres, and use as a template to mark the fixing holes on the substrate prior to drilling.

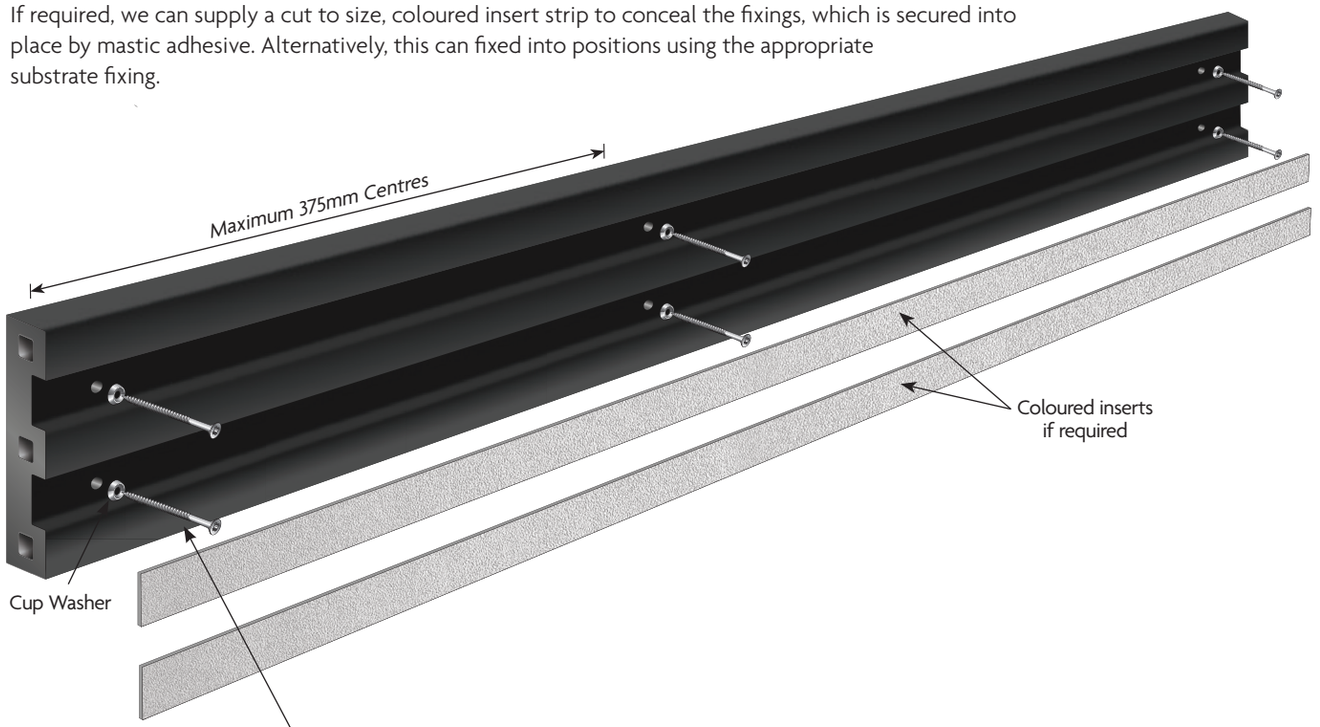
Once the substrate is drilled, feed the fixings through the holes and secure into position, ensuring that a metal cup washer is used to prevent the fixing from pulling through the rubber, with a screwdriver, cordless drill or torque drill.

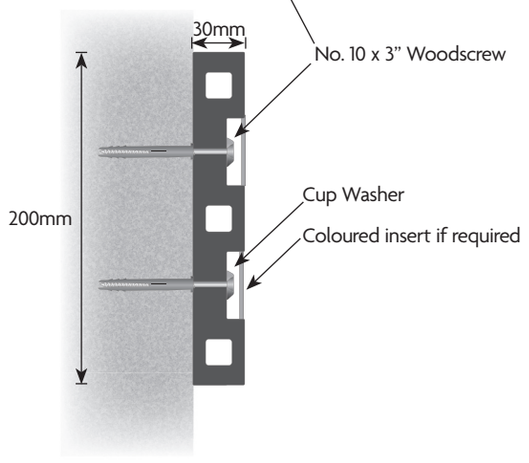
We recommend using screws and plugs, No. 10 x 3" Woodscrews, when fixing to brickwork/blockwork/concrete/timber, etc., or an alternative fixing as suggested in the table below.

External or internal corners are formed by butting the two lengths or cut pieces together. This section cannot be mitred at corners, but the face of the fender can be cut on a slight angle if preferred.

Alternative fixing methods are available for brickwork/blockwork/concrete, etc., such as Rawlbolt's, Liebig's, etc., please contact our Sales Office for more information.

If required, we can supply a cut to size, coloured insert strip to conceal the fixings, which is secured into place by mastic adhesive. Alternatively, this can fixed into positions using the appropriate substrate fixing.




| Wall Structure | Screw | Plug |
|---|---|---|
| Plasterboard | Appropriate length 6mm machine screw | 6mm Rubber Rawlnut |
| Brickwork, Breeze Blockwork, Concrete | Appropriate length No. 12 woodscrew | No. 12 Plastic plug |
| Lightweight Blockwork e.g. Thermalite, Siporex | Appropriate length No. 12 woodscrew | Fischer GB10 Plastic plug |
| Steel | Self-tapper | - |

N.B. Details on Expansion and Contraction, Glazed Areas, Cleaning, etc., are shown on the reverse of this document.

# GENERAL INFORMATION

YEOMAN SHIELD
WALL & DOOR PROTECTION

**Yeoman Shield products are manufactured using Vinylac, a specially formulated PVCu material that is resistant to impact and abrasion, which is exclusive to Harrison Thompson & Co. Ltd.**

## Fire Test Information PVCu Protection Products

Fire tested in accordance with and achieved the following:

**BS 476: Part 7: 1997** - The Surface Spread of Flame of Products - **Class 1Y** (**Class 1 is the best classification in this test**).

**BS 476: Part 6: 1989 + A1: 2009** - Fire Propagation for Products - **Class O** - As defined in the latest Building Regulations, Approved Document B (Fire Safety).

**BS EN 13823: 2010 + A1: 2014.**

**BS EN ISO 11925 - 2: 2010.**

**EN 13501 - 1: 2007 + A1: 2009.**

## Door Edge Protectors - Ⓟ Patented Product

Fire tested in accordance with and achieved the following:

**BS 476: Part 22: 1987** - For ½ hour or 1 hour fire integrity on full door assemblies.

**BS 476: Part 31.1: 1983** - To meet requirements of **BS 5588**.

## PVCu Clad Glazing Bead

Fire tested in accordance with and achieved the following:

**BS EN 1634 - 1: 2008** - For ½ hour or 1 hour fire doors.

**BS 476: Part 22: 1987** - For ½ hour or 1 hour fire integrity on full door assemblies.

**All testing has been carried out at Exova Warrington or Exova Chiltern Test Houses and the full fire test reports are available on request.**

## Surfaces & Cleaning

**Yeoman Shield** products are inherently hygienic if they are properly cleaned and maintained on a regular basis.

Our PVCu materials are **'rigid'** and they do not support the growth of bacteria or mould. When cleaning, we recommend using a solvent cleaner or products such as Dettox, Johnsons Clear, etc.

Stubborn marks may need an industrial strength solvent cleaner to remove them, such as TRADESOLVE 1 (UN 1294). **N.B.** This type of cleaner should be used strictly in accordance with the manufacturers recommendations.

Smooth surfaces are more likely to show all marks, scuffs and scratches. The textured surfaces of **Yeoman Shield** products helps to hide the everyday knocks, bumps, scrapes and marks caused by vehicular traffic.

## Maintenance

None required other than normal cleaning in accordance with details shown above.

## Chemical Resistance

Vinylac is unaffected by commercial solvents and cleaners.

## DDA (Disability Discrimination Act)

**Yeoman Shield** products do not contravene the **DDA** requirements, and meet the principals of **HTM69**. (Further details available if required).

## Installation

Manufacturers recommended fixing instructions are shown overleaf. However, if additional information or clarification of any points is required then please contact our Sales Office **0113 279 5854.**

We are **CHAS (Contractor, Health & Safety Assessment Scheme)**, accredited contractors.

All our operatives hold relevant **CSCS** cards with Site Foremen having the **SSSTS** Certificates.

## Expansion & Contraction

**Yeoman Shield** products **will** expand and contract according to temperature fluctuations:

**Generally, PVCu materials expand or contract 0.07mm/m for every 1°Celsius rise or fall.**

Please ensure that our materials are acclimatised to the environment into which they are being installed, they should be stored at normal working temperature for at least **24 hours** prior to fitting. We recommend the optimum temperature being **23°**, which is in line with the temperature during manufacture and this should limit the amount of expansion and contraction.

It is not advisable to take materials that have been stored in a cold environment, i.e. an unheated site, cold storage container/van, etc. and install these without allowing them to acclimatise, **as this may lead to unnecessary movement of material in the future.**

**N.B.** Greater movement may occur in glazed corridors. In extreme cases of temperature variation it may be necessary to use an alternative fixing method, please speak to our Sales Office for advice.

## Colour Fastness

All Vinylac products are UV stabilised, therefore reducing the fading effect when exposed to direct sunlight. It should be recognised, however, that excessive expansion will occur in these conditions.

Further information regarding this and other colour issues can be found in our brochure or colour card, both of which are available from our Sales Office, or on our website.

## Impact/Abrasion

Vinylac results: Abrasion **BS2782; Part 3:1990 Scratch ASTM D3363 - 74**.

## Bonding

Although **Yeoman Shield** supplied adhesives will perform in difficult environmental conditions they will activate more readily if applied at normal room temperature.

The bond strength will then continue to increase after the initial application.

## Warranty

**Yeoman Shield** products are guaranteed free from defects. If they are installed correctly and in accordance with the manufacturers recommendations, they will protect surfaces from damage for many years.

## Environmental

**Yeoman Shield** operates an Environmental policy and ensures the recycling of all materials and packaging wherever possible, a copy of our policy can be requested from our Sales Office.

All our materials/products are sourced and manufactured in the United Kingdom and can therefore contribute to achieving the requirement of the **BREEAM 2011 Technical Construction Manual** for building sustainability and life cycle, **as well as reducing our carbon footprint.**

## Health & Safety

Full **COSHH (Control of Substances Hazardous to Health)** details on all **Yeoman Shield** products are available from our Sales Office.

In accordance with **REACH** Regulations, our products do not contain any chemicals that are on the **SVHC (Substances of Very High Concern)** list dated June 2012.

## Technical Support & Advice

Data sheets on the various **Yeoman Shield** materials are available from our Sales Office.

## Timber Products

All wood incorporated in **Yeoman Shield** products is purchased from an **FSC supplier**.

**MAKING BUSINESS A PLEASURE**

Harrison Thompson & Co Ltd. Yeoman House, Whitehall Estate, Whitehall Road, Leeds, LS12 5JB.
Tel: 0113 279 5854 Fax: 0113 231 0406 Email: info@yeomanshield.com Website: www.yeomanshield.com

All Yeoman Shield materials/products are sourced and manufactured in the United Kingdom.

Registered Office as above. Registered in England No. 2669275 VAT Reg No. GB 169 3105 61
Directors: S.L.Russell, G.C.Brumwell, P.Christopher, A.C.Brumwell, R.Good. FI Mar 17