

# Sure-Score Creasing Matrix - Technical Information

## Determining the correct channel width

The correct size channel for creasing solid board is calculated as follows:

$2 \times \text{Board thickness} + \text{Creasing rule thickness} = \text{channel width}$

For example:

Board thickness = 450 microns  
Creasing Rule = 2pt (0.71mm)

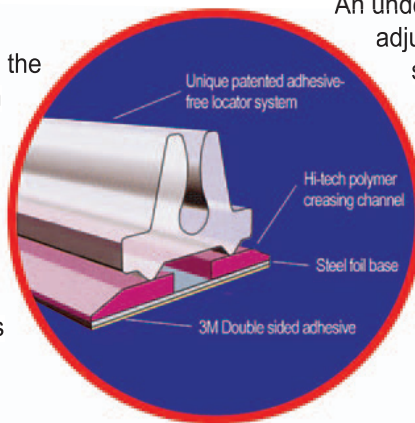
$(2 \times 0.45) + 0.71 = \text{Channel Width}$   
 $0.9 + 0.71 = 1.61\text{mm}$

As the theoretical channel width = 1.61, check the available range and select the closest match. In this case, the nearest Sure-Score matrix is Yellow, a channel width of 1.60mm

When determining the correct channel width for corrugated boards, the same rules apply, however the compressed thickness of the corrugated boards should be used.

It is strongly recommended to increase the channel width by at least 0.1mm, from the calculated size for cross grain creasing, particularly when creasing brittle, coarse fibre boards.

Within the Sure-Score Creasing Matrix system, there are many steps of 0.1mm specifically for long grain/cross grain creasing



## Determining the correct creasing/cutting rule heights

The difference between the cutting rule height and the creasing rule height must include an allowance of 0.25mm (0.01") for the thickness of the steel base and the pressure sensitive adhesive.

This is determined as follows:

$\text{Cutting Rule} - \text{Board thickness} - \text{base allowance} = \text{creasing rule height}$

For example:

Cutting rule height = 23.8mm  
Board thickness = 0.45mm  
Base allowance(Constant) = 0.25mm

$23.8 - 0.45 - 0.25 = 23.10 \text{ Creasing rule height}$

A creasing rule underheight is always preferable to overheight.

An underheight creasing rule can always be adjusted using Sure-Shim self adhesive stainless steel shim tape.

Remember: **Adjust or specify the creasing rule height to be 0.25mm lower than the allowance for the board thickness**



**MANMAT**  
C&K Extrusions Ltd  
12 Drayton Road  
Tonbridge  
Kent  
TN9 2BE  
United Kingdom

T +44 1732 369698  
F +44 1732 771009

[www.manmat.com](http://www.manmat.com)  
[manmat@ckextrusions.co.uk](mailto:manmat@ckextrusions.co.uk)