TSR Number: 06-50

Technical Service Request Report

05/07/2007

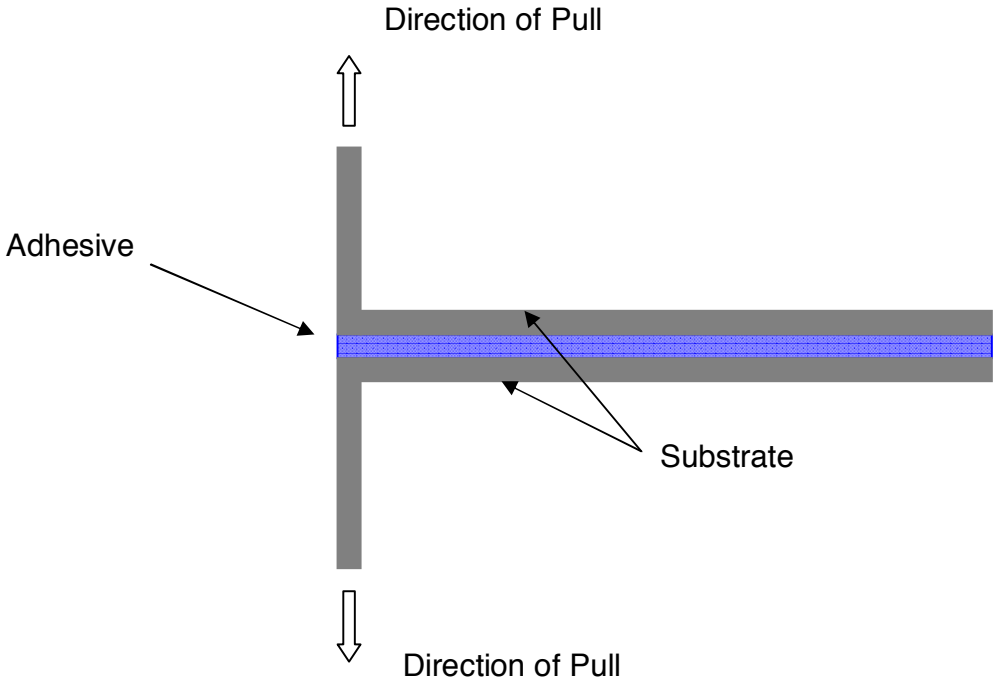
Introduction

Samples bonded with FF 855 were tested to provide peel and shear bond strengths on Fatra FF810 PVC roofing membrane.

Testing

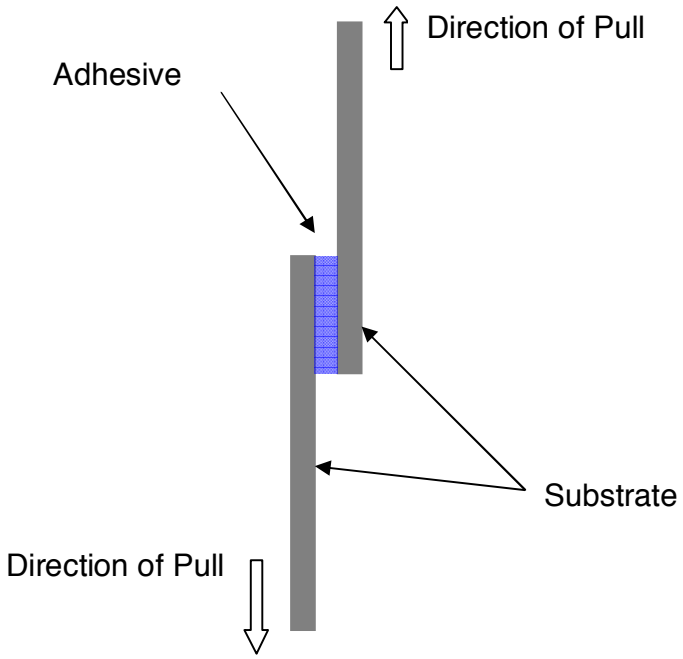
Samples were bonded as shown in Figure 1 and tested as T-Peel samples, the maximum and mean load strengths and the failure mode were recorded.

Figure 1:



Samples were bonded as shown in figure 2 and tested in shear, the maximum load strength and the failure mode was recorded.

Figure 2:



Results

Table 1: Summary of Peel Strength Results with FF 855

Substrate	Max Peel Strength (N)	Average Peel Strength (N)	Failure Mode
Fatra PVC Membrane	6.76	6.55	Substrate Failure

Table 2: Summary of Shear Test Results with FF 855

Substrate	Shear Strength (MPa)	Average Max Load Strength (N)	Failure Mode
Fatra PVC Membrane	0.619	464	Substrate failure / deformation*

Substrate failure* = 1 x break of PVC, 2 x membrane stretch, unable to break

Discussion

The data in table 1 shows that FF855 will successfully bond the Fatra membrane supplied. The failure mode achieved is substrate failure; this means that it is the strength of the substrate not that of the adhesive bond which limits the strengths achieved.
The data in table 2 also shows that C88 successfully bonds the Fatra membrane supplied, the failure mode of one sample tested was breakage of the membrane the other two samples stretched approximately 200% of their original length without break.

Conclusions

The data in this report shows that FF855 will successfully bond the Fatra PVC membrane supplied achieving substrate failure. This means that it is the strength of the substrate not that of the adhesive bond which limits the strengths achieved.