



Topic: Kink Resistance

When many fire hoses are dragged at low pressure they tend to kink. This is especially true when pulling hoses through narrow openings such as doorways.



Why is it important?

Kink resistance is a critical feature of fire hoses. When a hose kinks two things happen. Firstly, the flow through the hose is throttled and therefore reduced. Secondly, at the point of kinking a high spot results which leads to excessive abrasion and early failure of the hose. Both these effects mean reduced hose efficiency or even complete loss of flow.



How does Duraline perform?

Duraline's jacket is made of 100% polyamide (nylon). Nylon is more extensible than the cheaper and more commonly used polyester jacket and therefore "bends and stretches" when dragged into a curve. Duraline has unrivalled low pressure performance and exceptional resistance to kinking.



How do other hoses compare?

Competitors' fire hoses with a polyester jacket (which is most on the market) will show poor kink resistance when compared to Duraline. This can easily be demonstrated by using the UK Navy Kink test or indeed dragging both types of hose through a doorway at low pressure (say 3-4 bar).



Other support data:

*The UK Navy kink Test
If it isn't Angus, it can't be Duraline - Video
The Undercover Story - Video
Duraline - The World's Finest Fire Hose - Powerpoint
Presentation
BS6391 Type 3 Fire Hose Specification*