

Gripple Fire Rating Certificate

Project:	Temperature Test	Date:	23/08/2004
Reference:	2004/250/300/123	Product size:	No.1, 2 & 3 hangers

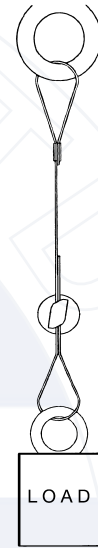
This fire rating certificate is issued by Gripple Limited to certify that the No.1, No.2 & No.3 Gripple hangers have been fire temperature tested, in the presence of Chiltern International Fire Ltd in the UK.

The tests were carried out at the Old West Gun Works, Sheffield, using the Gripple furnace, which was independently calibrated by Chiltern International Fire Ltd, ("CIFL").

The test specimen comprised a Gripple hanger including the accompanying galvanised wire rope (7x7 construction). The assembly was hung from an eyebolt with the Gripple hanger located within the furnace.

The test specimen was loaded with steel weights, which were hung from the bottom of the wire rope. The weights were weighed at CIFL on their calibrated scales (T5.19) before the test. The elapsed test time was monitored using a calibrated stopwatch (T5.86-6 supplied by CIFL).

Test configuration



Results

This certificate records the actual results achieved in the test which was carried out under the auspices of CIFL using their calibrated thermocouples and readout box (FT2.87).

Temperature	Gripple suspension		
	No.1	No.2	No.3
250°C	121 minutes	121 minutes	121 minutes
300°C	68 minutes	28 minutes	96 minutes



Derek Boaler
Gripple Research and Development