FLAT JACKS

The in-situ stress, deformability and resistance feature of masonry can be determined by the ?at jack method . The test is performed by making a cut to a uniform depth into the mortar courses and inserting the ?at jack or couple of jacks, which are pressurized to the desired level.

Test modes:

For **stress determination** a single flat jack has to be used.

For **deformability and resistance determination** two flat jacks have to be used.

The flat jacks have to be pressurized and the strain measured using the **Analogue** or **Digital** mode as follows:

Analogue measurement

The following accessories have to be used:

- 58-D0568/A Hydraulic pump with gauge. See accessories.
- 58-D0567/RS Connecting hose (to connect the two jacks). See accessories.
- 58-C230/30D Mechanical strain gauge. See accessories.

Digital measurement

The following accessories have to be used:

- 58-D0568 Hydraulic pump, less gauge. See accessories. 58-P0050 Pressure transducer. See accessories
- 58-D0567/RS Connecting hose (to connect the two jacks). See accessories. 58-D0585 Electronic extensometer (one to three). See accessories.
- 82-P9008: DATALOG 8, 8 channels stand alone multipurpose data logger (see accessories)

Note. In order to fill conveniently the testing cut, use the sets of steel sheets of the same flat jack dimensions. See accessories.

Weights:

58-D0567/C2, 58-C0567/C20 .....kg. approx.

58-D0567/E2, 58-D0567/E20 .....kg. approx.

FLAT JACKS

SPECIFICATION

		Analogical system (quantity needed)		Digital system (quantity needed)	
	Code	**System with one flat jack**	**System with two flat jacks**	**System with one flat jack**	**System with two flat jacks**
Rectangular flat jacks	58-D0567/C2	1	2	1	2
	58-D0567/C11	1 or more	1 or more	1 or more	1 or more
	58-D0567/C20	1 or more	2 or more	1 or more	2 or more
Semi-oval flat jacks	58-D0567/E2	1	2	1	2
	58-D0567/E11	1 or more	1 or more	1 or more	1 or more
	58-D0567/E20	1 or more	2 or more	1 or more	2 or more

	58-D0568/A	1	1	1	1
	82-P0050	-	-	1	1
	82-P0349/ELT	-	-	1	1
	58-D0568/4	-	-	1	1
Hydraulic pump					
	58-D0567/RS	-	1	-	1
	58-C0230/30D	1	1	-	-
Strain measurement					
	58-D0585	-	-	1 or more	1 or more
	82-P9008/F	-	-	1	1
	82-P9008/ELT	-	-	2	2
Datalogger	82-P9008/SOF	-	-	1 (optional)	1 (optional)

ACCESSORIES

58-D0567/C11

Set of five steel sheets

58-D0567/E11

Set of five steel sheets for semioval flat jacks

82-P9008/ELT

Set of four cables for connecting load cells, pressure transducers, strain gauges, LDT / LVDT / potentiometric type displacement transducers to DATALOG 8 (82-P9008) and GEODATALOG 8 (30-WF6008)

82-P9008/SOF

DATACOMM 2 data acquisition software and LAN cablefor PC connection of DATALOG 8 (82-P9008, P9008/F) - Up to 8 datalogger (total 64 channels) can be connected to a single PC creating a modular network (LAN hub is required)

82-P0050

Pressure transducer 0-50 bar (connecting cable notincluded)

82-P0349/ELT

Connecting cable for pressure transducer. Suitablefor Smart-Line, Sercomp, MCC, Advantest control consoles and Compact-Line compression machines.

82-P9008

DATALOG 8, 8 channels stand alone multipurpose data logger. 110-230V / 50-60Hz / 1 Ph.

58-C0230/30D

Device for the measurement of length variation with digital dial gauge. Measuring base 300 mm. Measuring range 5 mm. Resolution 0.001 mm. Comprehends digital dial gauge with output for PC connection (special cable required). Conforming to BS 1881:206

58-D0567/RS

Connecting flexible hose, 700 mm length for testing two flat jacks.

58-D0568

Hydraulic hand pump with reservoir and flexible hose

58-D0568/A

Hydraulic hand pump with pressure gauge 100 bar range

58-D0568/4

Connecting coupling for pressure transducer

58-D0585

Tubolar electronic extensometer.

ORDERING CODE

58-D0567/C2

Rectangular flat jack 400x200 mm, 50 bar

58-D0567/C20

Rectangular flat jack 400x200 mm, 50 bar, less valves.

58-D0567/E2

Semioval flat jack 350x260 mm, 50 bar

58-D0567/E20

Semioval flat jack 350x250 mm, 50 bar, less valves.

Typical application of two semi-oval flat jacks with mechanical strain gauge for determining the strength and deformability features

Preparation of slots for the flat jacks on a brickwork surface using a simple drill, overlapping holes and completing manually

Preparation of the cut for the semi-oval and circular segment flat jacks using a cutting saw.