Transport Roads & Maritime Services

NSW GOVERNMENT

Test method T1552

Resistance to heat of plastic barrier boards

NOVEMBER 2012

Revision Summary

Ed/Rev Number	Clause Number	Description of Revision	Authorisation	Date
		Reformatted and Revision Summary Added	D.Dash	June 2001
Ed 2/ Rev 0	All	Reformatted RMS template	J Friedrich	November 2012

Note that Roads and Maritime Services is hereafter referred to as 'RMS'.

The most recent revision to Test method T1552 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T1552

Resistance to heat of plastic barrier boards

1. Scope

This test sets out the procedure for determining the resistance to deformation caused by bending at elevated temperatures.

2. Apparatus

(a) A thermostatically controlled oven with good air circulation, capable of maintaining temperature within the range 59°C to 61°C, and of recovery to the working temperature within five minutes

(b) A specimen holder similar to that illustrated in Fig 1. (See Note 1 for description)

(c) A means of measuring the deflection of the board to 0.1mm, such as a straight edge and a vernier, or a dial gauge

(d) A weight with a hook suitable for attachment onto the weight holder (9), totalling 10 kg

3. Procedure

(a) Cut a section of 600 mm length of a barrier board

(b) Insert the section half-way into the specimen holder. Attach the weight holder to the middle of the section. Zero the vernier or the dial gauge to the scale on the holder

(c) Suspend the weight onto the weight holder. Record the deflection, if any. Place the whole apparatus in the oven for two hours

(d) Record the deflection of the board immediately after removal from the oven. Remove the weight and allow the mounted board to cool. There should be no measurable permanent deformation of the board

4. Reporting

The report shall include the following:

(a) Identification of material under test

(b) The value of deflection

(c) The occurrence of any permanent deflection

5. Notes

(a) The specimen holder is built from 3 mm steel plates or other suitable material

(b) A vernier scale or a dial gauge is mounted and aligned before each test in the hole on the top bar (1)

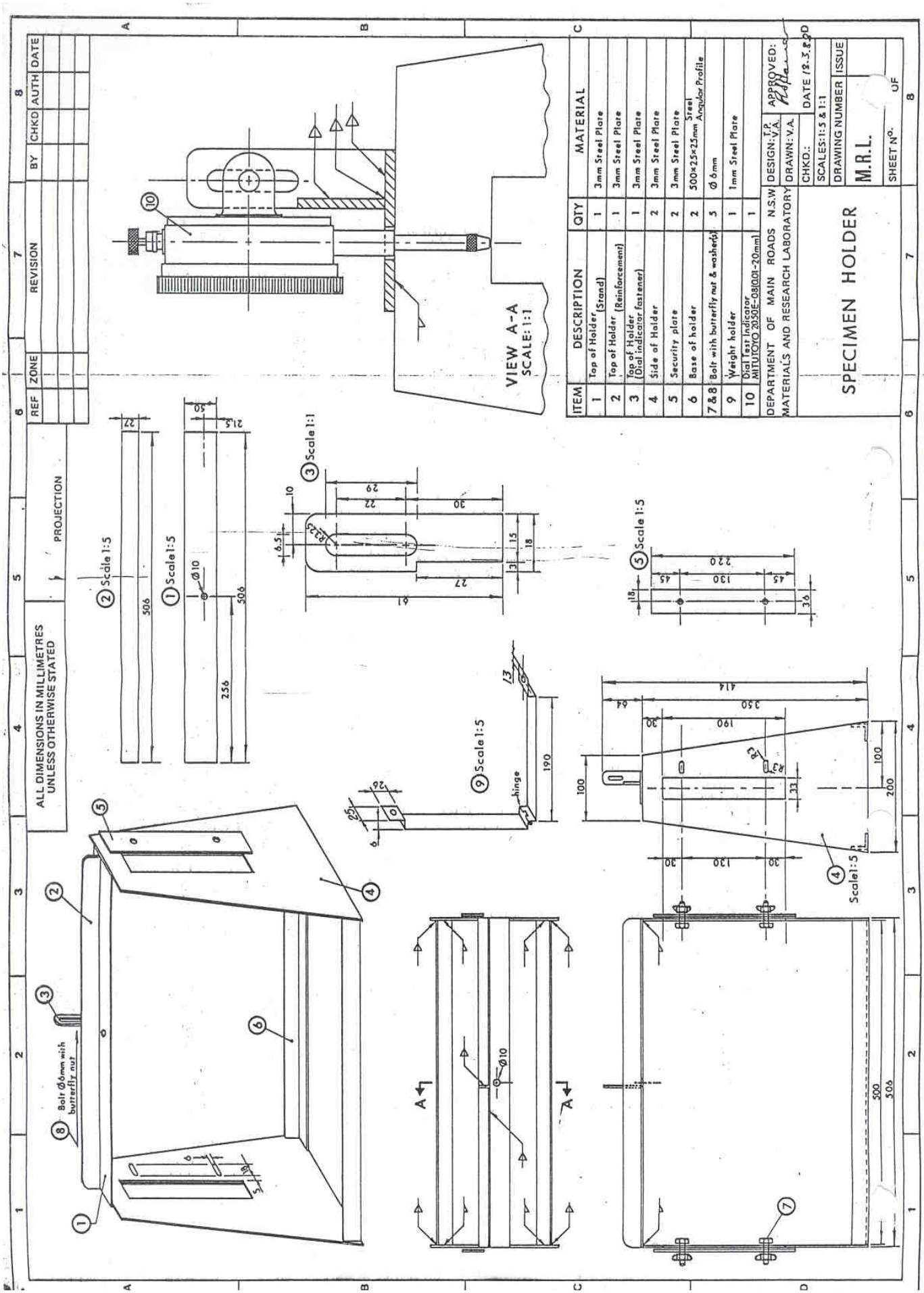
(c) The weight holder is made of 1 mm steel or other suitable material and consists of two parts connected by a hinge. The ends of the clamp are provided with coinciding 6-7 mm holes for the weight's hook

(d) The sides of the holder (4) contain a 33 x 190 mm window through which the barrier board is pushed in and secured loosely by means of plates (5) and appropriate M5-M6 screws with butterfly nuts

(e) The plates (5) are provided with 5-6 mm holes, and sides (4) with elongated holes so that the plates may limit the windows down to 25 mm width

(f) Two angular profiles of steel at the bottom and one steel plate at the top are welded so that the distance between sides (4) is 500 mm as measured inside

(g) The vernier scale or the dial gauge (10) should enable reading of 0.05 mm accuracy


SPECIMEN HOLDER
DEPARTMENT OF MAIN ROADS N.S.W
MATERIALS AND RESEARCH LABORATORY
M.R.L.
ITEM
DESCRIPTION
QTY
MATERIAL
1 Top of Holder (Stand) 1 3mm Steel Plate
2 Top of Holder (Reinforcement) 1 3mm Steel Plate
3 Top of Holder (Dial indicator fastener) 1 3mm Steel Plate
4 Side of Holder 2 3mm Steel Plate
5 Security plate 2 3mm Steel Plate
6 Base of holder 2 300×25×25mm Steel Angular Profile
7 & 8 Bolt with butterfly nut & washer 5 Ø 6mm
9 Weight holder 1 1mm Steel Plate
10 Dial Test Indicator MITUTOYO 2050E-08(0.01-20mm) 1
VIEW A-A SCALE: 1:1
ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED
PROJECTION
REVISION
BY
CHKD
AUTH
DATE
REF
ZONE
DESIGN: T.P.
DRAWN: V.A.
CHKD.:
APPROVED:
DATE 18.3.82
SCALES: 1:5 & 1:1
DRAWING NUMBER
ISSUE
SHEET N°.
OF
Bolt Ø6mm with butterfly nut
hinge