



Australian Government

**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/9C/288

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

@Weigh Model TF1212 Weighing Instrument

submitted by @Weigh Pty Ltd
now of Unit 31, 102 Keys Road
Moorabbin VIC 3189

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

This approval becomes subject to review on **1/08/16**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – certificate issued	7/07/06
1	Pattern & variants 1 to 3 reviewed & updated – variants 4 & 5 approved – certificate issued	2/12/11

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/9C/288' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates No S1/0/A or No S1/0B.

The pattern as approved herein or with substitute approved load cells and/or approved indicators and in other capacities, or with different platform sizes, shall comply with General Certificate of Approval No 6B/0.

Note: New instruments manufactured under this approval shall only use load cells and/or indicators with current Supplementary Certificates of Approval.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to the instrument shall be within the limits specified herein and in any approval documentation for the components where they are approved separately.

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.

A handwritten signature in black ink, consisting of a series of loops and flourishes, positioned to the right of the signature text.

TECHNICAL SCHEDULE No 6/9C/288

1. Description of Pattern **approved on 7/07/06**

An @Weigh model TF1212 self-indicating class $\text{\textcircled{III}}$ weighing instrument of 1500 kg maximum capacity and approved for use with up to 3000 verification scale intervals.

1.1 Basework

The model TF1212 basework (Figure 1) has the load receptor directly supported by load cells fitted with self-aligning supporting feet.

This model basework has nominal dimensions of 1200 × 1200 mm.

If approach ramps are provided care shall be taken to ensure that these do not interfere with the platform.

1.2 Load Cells

Four CAS model BSA-1t load cells of 1000 kg capacity are used and are mounted as shown in Figure 1. The load cells are also described in the documentation of approval NMI S444.

1.3 Indicator

A Rinstrum model R310 digital indicator is used. The indicator is described in the documentation of approval NSC S420.

1.4 Levelling

Where instruments are liable to be tilted (i.e. they are not installed in a permanently fixed location) they are provided with adjustable feet and a level indicator. Adjacent to the level indicator is a notice stating 'instrument must be level when in use', or similar wording.

1.5 Verification Provision

Provision is made for the application of a verification mark.

1.6 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	@Weigh Pty Ltd
Indication of accuracy class	$\text{\textcircled{III}}$
Maximum capacity	<i>Max</i> kg (#)
Minimum capacity	<i>Min</i> kg (#)
Verification scale interval	<i>e</i> = kg (#)
Tare capacity (if less than <i>Max</i>)	<i>T</i> = - kg
Serial number of the instrument
Pattern approval mark for the instrument	NMI 6/9C/288
Pattern approval mark for the load cells	S...
Pattern approval mark for the indicator	S...

(#) These markings shall also be shown near the display of the result if they are not already located there.

1.7 Sealing Provision

Provision is made for the calibration adjustments to be sealed as described in the approval documentation for the indicator.

2. Description of Variant 1 approved on 7/07/06

Various models of the @Weigh TF and TFS series in capacities as listed below, provided that instruments comply with General Certificate No 6B/0:

- from 100 kg up to 1499 kg; and
- from 1500 kg up to 14 999 kg.

The TFS series baseworks are similar to the TF series but of stainless steel construction.

Note: The numeric suffix to the model number indicates the platform size, e.g. the pattern (model TF1212) has a 1200 x 1200 mm platform.

3. Description of Variant 2 approved on 7/07/06

Certain models of the TPF series in capacities from 600 kg to 3000 kg. A typical TPF series basework is shown in Figure 2.

Note: The TPF series baseworks may be provided with wheels/rollers to facilitate ease of relocation, however levelling feet and a level indicator shall be provided and the instrument must be levelled following relocation.

4. Description of Variant 3 approved on 7/07/06

Other instruments in the TF and TFS series with the load receptor in the form of a hopper or bag suspended from the base frame (Figure 3) in capacities from 100 kg up to 1499 kg, or from 1500 kg to 14 999 kg.

Suitable provision must be made for the application of suitable verified masses to the instrument as required for verification and certification purposes. It may be necessary for such masses to be incorporated within the design of the instrument.

3. Description of Variant 4 approved on 2/12 2011

The model TF1212 TAZ which is similar to the model TF1212, but has a ladder-style cross-member (Figure 4).

4. Description of Variant 5 approved on 2/12 2011

The model TF1212 DDZ which is similar to the model TF1212, except that it has an alternative low-profile load receptor (Figure 5).

TEST PROCEDURE No 6/9C/288

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

FIGURE 6/9C/288 – 1

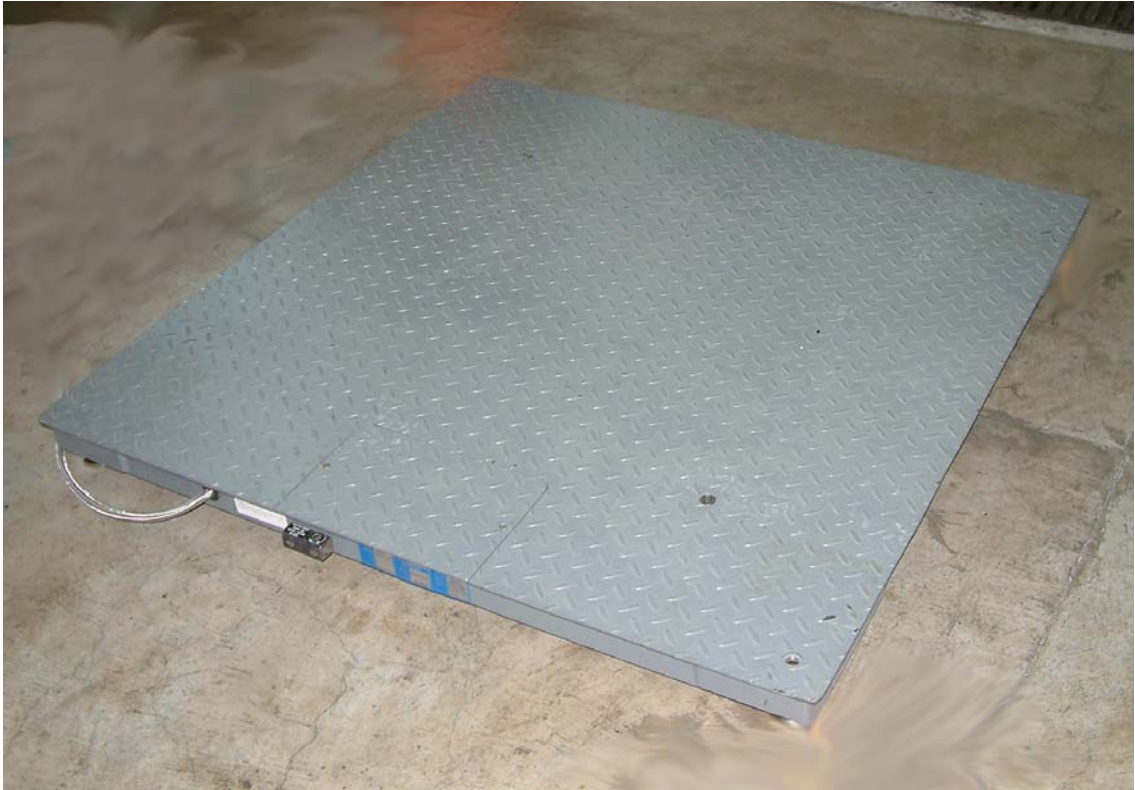
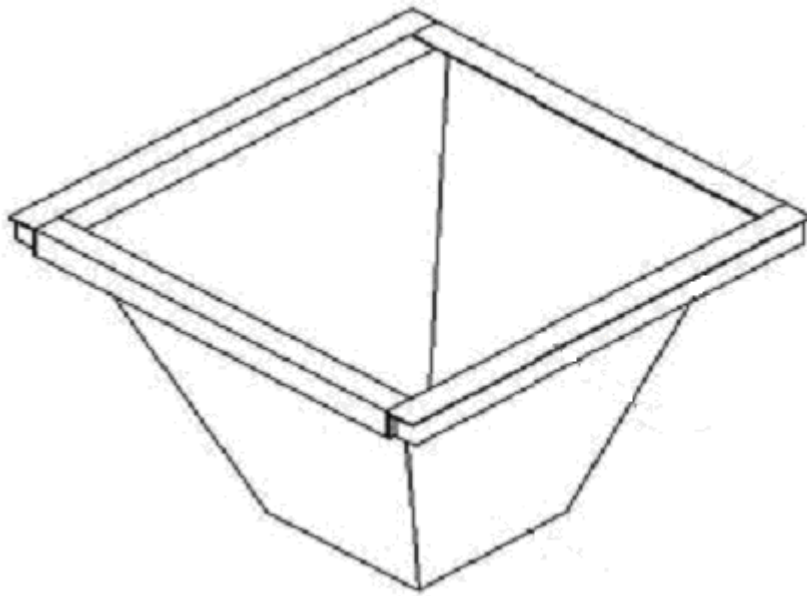


FIGURE 6/9C/288 – 2

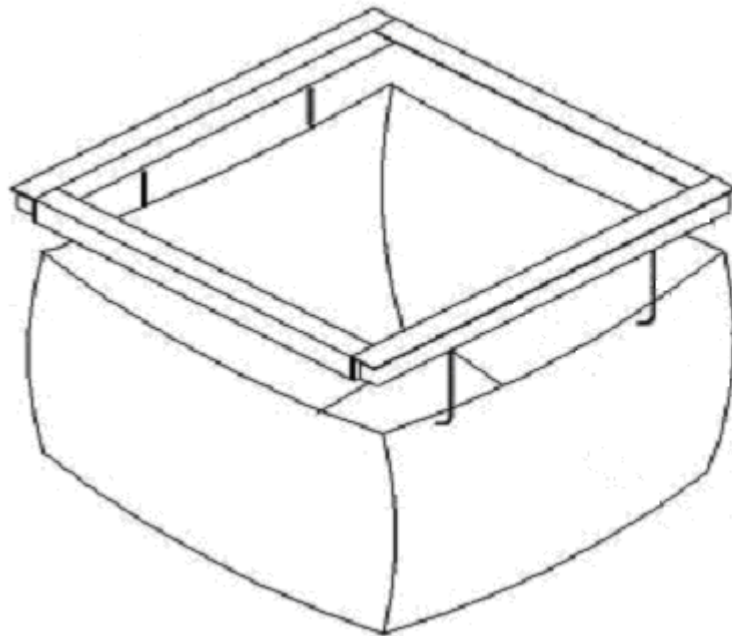


Typical @Weigh TPF Series Weighing Instrument (Variant 2)

FIGURE 6/9C/288 – 3



Typical Hopper Load Receptor – Variant 3



Typical Suspended-bag Load Receptor – Variant 3

FIGURE 6/9C/288 – 4



Typical Model TF1212 TAZ Weighing Instrument (Variant 4)

FIGURE 6/9C/288 – 5



Typical Model TF1212 DDZ Weighing Instrument (Variant 5)

~ End of Document ~