

Australian/New Zealand Standard™

Reconstituted wood-based panels—Methods of test

Method 27: Resistance to impact

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-005, Reconstituted Timber Panel Products.

This Standard is a revision of AS/NZS 4266.27:1996, with updated referenced document information.

METHOD

1 SCOPE

This Standard sets out a method for determining the impact resistance of decorative overlaid panels.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

1859 Reconstituted wood-based panels

1859.3 Part 3: Decorative overlaid wood panels

4266 Reconstituted wood-based panels—Methods of test

4266.1 Method 1: Sampling, cutting, and conditioning of test pieces

4491 Timber—Glossary of terms in timber related Standards

3 DEFINITIONS

For the purpose of this Standard, the definitions in AS/NZS 4491 and AS/NZS 4266.1 apply.

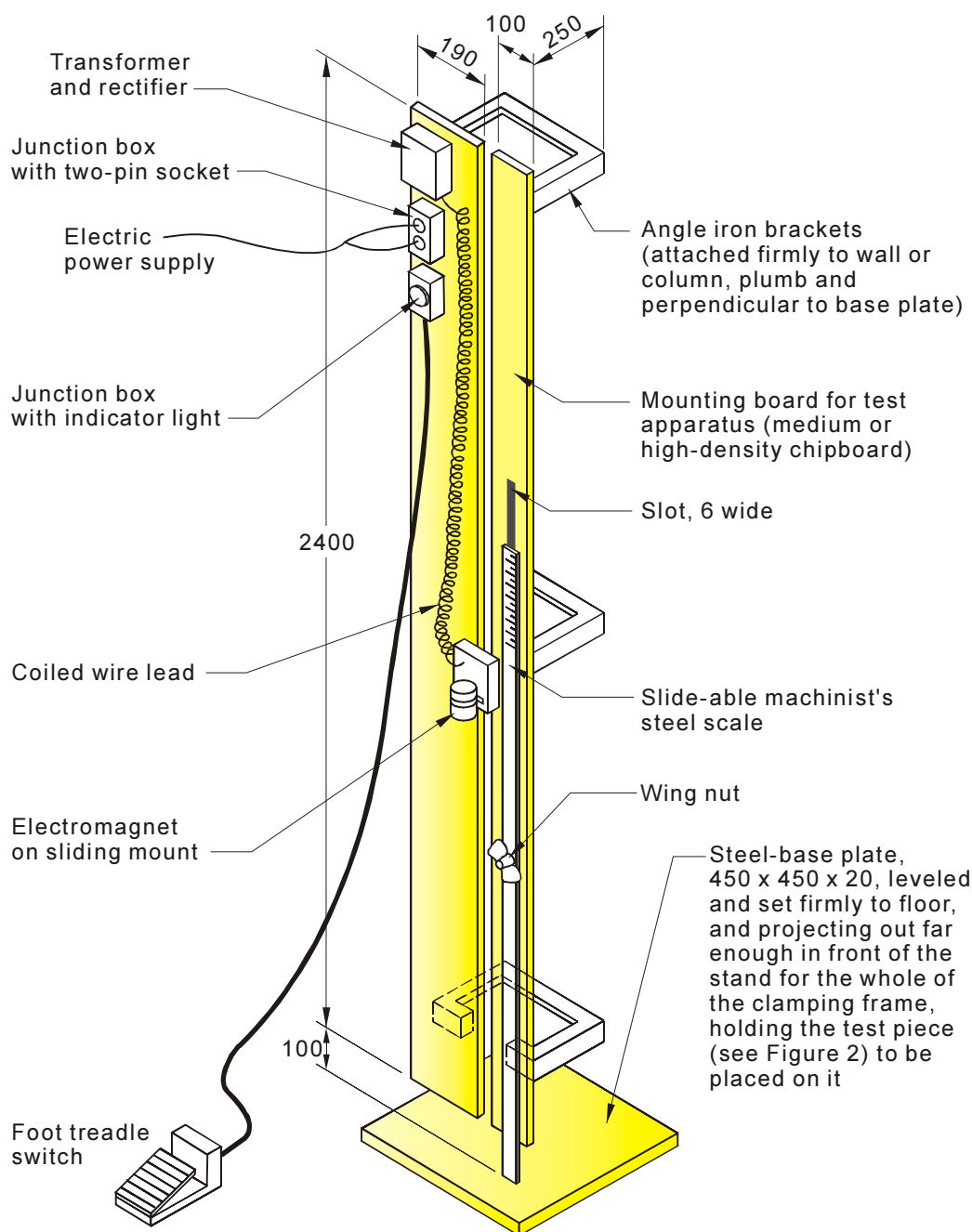
4 PRINCIPLE

The test piece from the panel has its decorative surface covered with carbon paper and subjected to the impact of a steel ball, which is allowed to fall from a known height. Impact resistance is expressed as the maximum drop height, which can be achieved without incurring visible surface cracking or producing an imprint greater than the specified maximum diameter.

5 APPARATUS

The following apparatus is required:

- (a) *Free-fall test apparatus*—a typical unit is shown in Figure 1.



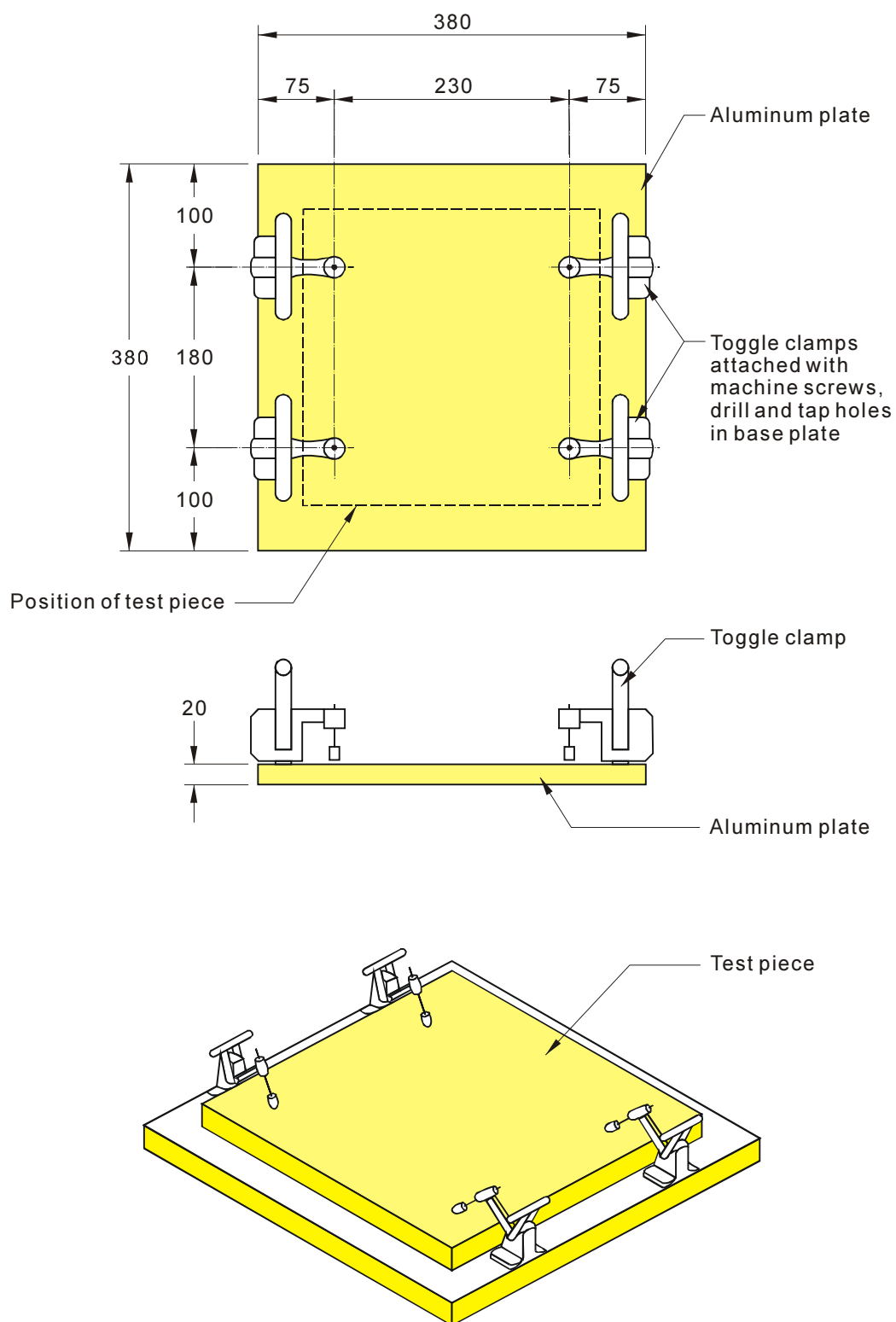
DIMENSIONS IN MILLIMETRES

FIGURE 1 TYPICAL FREE-FALL APPARATUS

- (b) *Polished steel ball*—weighing 224 ± 3.0 g and measuring 38.1 ± 0.2 mm in diameter, having no damage or flattened surface.
- (c) *Release device*—a device capable of releasing the steel ball.

NOTE: Electromagnetic or pneumatic release devices are considered suitable.

- (d) *Clamping frame*—a suitable arrangement is shown in Figure 2.



DIMENSIONS IN MILLIMETRES

FIGURE 2 TYPICAL CLAMPING FRAME