STANDARDS UPDATE

PIPA PLASTICS INDUSTRY PIPE ASSOCIATION OF AUSTRALIA LIMITED

AS/NZS 61386.21:2015 AMD 2:2023 "CONDUIT SYSTEMS FOR CABLE MANAGEMENT, PART 21: PARTICULAR REQUIREMENTS - RIGID CONDUIT SYSTEMS"

PUBLISHED: 19 MAY 2023

Summary

Amendment 2 to AS/NZS 61386.21 applies to the following:

- PREFACE
- Clause 8.201.1
- Table 201
- Table 207

The latest amendments have incorporated the requirements for rigid plain conduits and fittings of insulating material used in electrical installations as per AS/NZS 2053.2 "Conduits and Fittings for Electrical Installations – Rigid Plain Conduits and Fittings of Insulating Material".

With the publication of amendment 2 of AS/NZS 61386.21, there will now be a process to withdraw AS/NZS 2053.2 "Conduits and fittings for electrical installations Rigid plain conduits and fittings of insulating material".

Note: Until the withdrawal process is completed, including any transition period, AS/NZS 2053.2 remains current, as does product certification to this Standard.

What does this mean for manufacturers?

Until the transition period is completed (timeframe to be confirmed), manufacturers can continue to supply pipe and fittings manufactured and certified to AS/NZS 2053.2. It will be up to the individual manufacturers as to when they transition to manufacturing to AS/NZS 6386.21.

What does this mean for end users?

When AS/NZS 2053.2 is withdrawn, it will be up to the relevant end users and authorities as to which Standard they reference within their specifications.

They may even continue to reference AS/NZS 2053.2 as it is possible to reference a withdrawn Standard.

What is a withdrawn standard?

A withdrawn Standard simply means that it will no longer be updated or maintained. It can be still referenced, manufactured, and certified to.

What are the main differences for conduits manufactured to AS/NZS 2053.2 and AS/NZS 6386.21?

In **AS/NZS 2053.2**, conduits must comply with the dimensions in Table 101, including outside diameter and wall thickness.

Table 201 of AS/NZS 61386.21 includes no minimum wall thickness, only a mean minimum inside diameter.

In **AS/NZS 61386.21,** conduits <100mm nominal diameter are subjected to a compression test as is the case for all conduit in AS/NZS 2053.2.

In **AS/NZS 61386.21,** conduits ≥100mm nominal diameter must be subjected to a ring stiffness test in accordance with ISO 9969. The wall thickness is effectively governed by the mechanical classification and corresponding ring stiffness, and may result in a reduced wall thickness, when compared to the same mechanical classification in AS/NZS 2053.2.

For example, a 100mm nominal diameter PVC conduit that currently meets the HD classification in AS/NZS 2053.2 will be approximately equivalent to the VHD classification in AS/NZS 61386.21.

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Key changes include:

PREFACE

After the third paragraph the following has been added:

"The objective of Amendment 2 is to specify minimum inside diameter dimensions, particularly for larger size conduits carrying multiple cables and clarification of the relationship between the mechanical classifications in AS/NZS 2053.2. and AS/NZS 61386.21."

Clause 8.201.1

The second sentence has been deleted and replaced with the following:

"Polyethylene conduits shall comply with the dimensions of Table 2 of AS/NZS 4130:2018".

Table 201

The table has been updated to include minimum mean inside diameters.

Table 207

The table has been updated to add the approximate equivalent mechanical classification in AS/NZS 2053.2 as summarised below:

AS/NZS 61386.21		AS/NZS 2053.2
Conduit Classification	Ring Stiffness	Approximate Equivalent Mechanical Classification
LD	SN2	-
MD	SN4	LD
HD	SN10	MD
VHD	SN25	HD