AUSTRALIAN STEEL INSTITUTE

Standards and Handbooks List - cold formed steel construction

Core List

Designation	Title	Overview
AS 1562.1:2018	Design and installation of metal roof and wall cladding, Part 1: Metal	Sets out requirements for the design and installation of self-supporting metal roof and wall cladding, subjected to out-of-plane external actions and in-plane thermally induced actions, permanent actions on walls and steep roofs and frictional drag of wind and snow actions
AS/NZS 4600:2018	Cold-formed steel structures	Sets out minimum requirements for the design of structural members cold-formed to shape from carbon or low-alloy steel sheet, strip, plate or bar not more than 25 mm in thickness and used for load-carrying purposes in buildings
AS 1397:2021	Continuous hot-dip metallic coated steel sheet and strip — Coatings of zinc and zinc alloyed with aluminium and magnesium	Specifies requirements for continuously hot-dip metallic coated sheet steel and strip supplied in thicknesses up to and including 5.0 mm
AS/NZS 3500.3:2021	Plumbing and drainage, Part 3: Stormwater drainage	Sets out the requirements for materials, design, installation and testing of roof drainage systems, surface drainage systems and subsoil drainage systems to a point of connection
AS/NZS 2179.1:2014	Specifications for rainwater goods, accessories and fasteners, Part 1: Metal shape or sheet rainwater goods, and metal accessories and fasteners	Specifies requirements for pre-painted metal, metal and organic film/metal laminated shape or sheet rainwater goods, and metal accessories and fasteners
HB 39:2015	Installation code for metal roof and wall cladding	Provides information and guidelines on the selection, performance and installation of metal roofing and wall cladding. The measures contained will provide a weatherproof exterior and ensure that all rainwater is directed to the stormwater drainage system. Also known as installation roofing code.

Specialised Construction

- Steel building frames

Designation	Title	Overview
NASH Standard NS100	Residential and Low-rise Steel Framing, Part 1: Design Criteria (2006)	
NASH Standard NS210 + NS220	Residential and Low-rise Steel Framing, Part 2: Design Solutions (2014)	
NASH Handbook NH100	Residential and Low-Rise Steel Framing (2009)	
NASH Handbook NH200	Design Solutions for Fire Resistance and Sound Insulation: Part 1 (2018)	

- Bushfire prone areas

Designation	Title	Overview
AS 3959:2018	Construction of buildings in bushfire-prone areas	Specifies requirements for the construction of buildings in bushfire-prone areas in order to improve their resistance to bushfire attack from burning embers, radiant heat, flame contact and combinations of the three attack forms.
NASH Standard NS300	Steel Framed Construction in Bushfire Areas (2014)	

- Ancillary and complementary building components

Designation	Title	Overview
AS 3566.1:2002	Self-drilling screws for the building and construction industries, Part 1: General requirements and mechanical properties	Specifies the dimensions, thread forms, lead types, mechanical properties and performance and working requirements for self-drilling screws intended for drilling and tapping into steel and fixing to timber.
AS 3566.2:2002 [Withdrawn]	Self-drilling screws for the building and construction industries, Part 2: Corrosion resistance requirements	Specifies the requirements for four levels of the corrosion resistance of self-drilling screws for the building and construction industries.
AS 4200.1:2017	Pliable building membranes and underlays, Part 1: Materials	Sets out requirements for materials for use as pliable building membranes (also known as sarking or underlay), when used either independently or as a facing to other

		materials, such as insulation materials, and as control functions for water, thermal vapour or air control.
AS 4200.2:2017	Pliable building membranes and underlays, Part 2: Installation	Sets out requirements for the installation of pliable building membranes (also known as 'sarking' or 'underlay'), when used either independently or as a facing to other materials, such as insulation materials, for water control, thermal control, vapour control or air control, or a combination of these control functions.

- Unique structural design considerations

Designation	Title	Overview
AS/NZS 1170 series		
AS/NZS 1170.0:2002	Structural design actions, Part 0: General principles	Provides the procedure for structural design. It includes design procedures, reference to design actions (other parts of the series), combinations of actions, detailing for robustness, methods of analysis and methods for confirmation of a limit states design. It also covers the use of special studies and experimental testing and, for New Zealand, criteria for selection of annual probability of exceedance. Information is given in appendices on selection of serviceability criteria.
AS/NZS 1170.1:2002	Structural design actions, Part 1: Permanent, imposed and other actions	Provides design values of permanent, imposed and other actions to be used in the limit state design of structures and members. It is intended to be used in conjunction with AS/NZS 1170.0. Other actions covered include liquid pressure, ground water, rain water ponding and earth pressure.
AS/NZS 1170.2:2021	Structural design actions, Part 2: Wind actions	Sets out procedures for determining wind speeds and resulting wind actions to be used in the structural design of structures subjected to wind actions other than those caused by tornadoes.
AS/NZS 1170.3:2003	Structural design actions, Part 3: Snow and ice actions	Provides design values of snow and ice actions for use in structural

		design. It is intended to be used in conjunction with AS/NZS 1170.0, which gives the procedure for structural design. Snow regions are defined and ground snow loads are provided for a range of annual probabilities of exceedance. Other factors cover the environment around the structure, the geometry of the structure and the effect of winds on snow distribution.
AS 1170.4:2024	Structural design actions, Part 4: Earthquake actions in Australia	AS 1170.4:2024 provides designers of structures with earthquake actions and general detailing requirements for use in the design of structures subject to earthquakes with a primary focus on life safety.

- Composite construction

Designation	Title	Overview
AS/NZS 2327:2017	Composite structures - Composite steel-concrete construction in buildings	Sets out minimum requirements for the design, detailing and construction of simply supported composite beams composed of a steel beam interconnected to a concrete slab by shear connectors, including applications in which the slab incorporates profiled steel sheeting. Covers strength and serviceability design for flexure, transverse and longitudinal shear and their interdependence as well as design for fire-resistance. Permits the use of partial shear connection and a wider variety of steel beam sections and shear connector types than previously allowed. Includes detail requirements for construction loads, slab reinforcement and sheer connector positioning, along and transverse to the beam length. Also included are a number of appendices containing design flowcharts and other helpful information.

- Product testing

Designation	Title	Overview
AS 4040 series		
AS 4040.0-1992	Methods of testing sheet roof and wall cladding, Part 0: Introduction, list of methods and general requirements	Specifies a series of test methods which can be applied to sheet roof and wall cladding of various forms and base materials.
AS 4040.1-1992	Methods of testing sheet roof and wall cladding, Method 1: Resistance to concentrated loads	Specifies a series of test methods which can be applied to sheet roof and wall cladding of various forms and base materials.
AS 4040.2-1992	Methods of testing sheet roof and wall cladding, Method 2: Resistance to wind pressures for non-cyclone regions	Specifies a series of test methods which can be applied to sheet roof and wall cladding of various forms and base materials.
AS 4040.3:2018	Methods of testing sheet roof and wall cladding, Method 3: Resistance to wind pressures for cyclone regions	Specifies a series of test methods which can be applied to sheet roof and wall cladding of various forms and base materials.
AS/NZS 4040.5:1996	Methods of testing sheet roof and wall cladding, Method 5: Resistance to impact (sandbag) for wall boards	This Standard sets out a method of test intended to simulate the impact of a heavy soft body upon a wall clad with either Type A or Type B cladding. Type A and Type B cladding is defined in AS/NZS 4256.4.