

Raven Seals are designed to meet the most rigorous International Standards and Building Codes. Throughout, icons and symbols have been used to readily identify and make selection easier. Raven Seals, in the main, have been tested to British, ISO, Australian and New Zealand Standards, which in many cases are the same or similar to US Standards and Building Code requirements. Specifiers should determine the suitability of products shown or contact Raven's Technical Department for assistance.



States and Territories of Australia apply their own Building Control, Acts and Regulations. All States and Territories have adopted the Building Code of Australia (BCA). Like many overseas building codes, the Building Code of Australia (BCA), is increasingly a performance based building code. New Zealand Building Code is referencing NZ BIA (Building Industry Authority Approved Documents).

British requirements: Building Regulations for England & Wales, Scotland and Northern Ireland apply. Conformance for each area can be established by the relevant Approved Documents ie. *Approved Document B* (England & Wales), *Scottish Technical Standards, Technical Booklet E*, to the Building Regulations (Northern Ireland).

Variation between States and County Councils exists. Mainly adopted are 2000 International Building Code and 2000 International Residential Code.

Weather - Energy



Class 2-9 Buildings Health & Amenity. BCA Sect. F. Damp & Weatherproofing FO1; FP1.4 Part F1.13
Bushfire Areas BCA Sect. G. Part G5
Energy Efficiency Installations Part 12.
Energy Efficiency - Building Sealing. BCA Sect. J. JPI(f), Part J3. J3.4
Class 1 & 10 Buildings. Housing Provisions Damp & Weatherproofing BCA Sect.2 Part 2. P2.2.2. Fire Safety Part 2.3 **Bushfire Areas:** P2.3.4 Part 3.7.4 Table 3.7.4.1 (external doors)
Energy Efficiency BCA Sect.2., Part 2.6 O2.6 F2.6 P2.6.1(f).
Building Sealing Part 3.12. contents 3.12.3.3
AS 4420.4 Air infiltration test,
AS 4420.5 Water penetration test,
AS2047 - Windows & doors in buildings,
AS 1939 (IEC529) protection/enclosures for electrical equipment IP Code,
AS 1530.7 Smoke control door and shutter assemblies.
NZ BIA Approved Document H (energy efficiency).

Building Regulations Approved Document L1 & L2, BS 7386, BS 8104, CIBSE TM 23:2002 Testing of building for leakage (Part L1 & L2 requirements),
BS 5368 Methods of testing windows (various parts - air permeability, watertightness, wind resistance),
BS EN 10077-1 Thermal performance of windows, doors, shutters,
ISO 8272 Air permeability test,
IEC 529 Degrees of protection provided by enclosures for electrical equipment,
ISO 9972 Thermal insulation - Determination of building air tightness - Fan pressurisation method,
ISO 5925-1 Evaluation of performance of smoke control door assemblies (Part 1 Ambient temperature test),

IBC 2000 International Building Code, Residential Code,
ANSI/ASHRAE/IESNA Standard 90 P Energy conservation in new building design *Section 4*,
ASTM E283 Rate of air leakage through exterior windows, curtain walls and doors.

Noise - Acoustic



Class 2-9 Buildings Sound Transmission & Insulation; BCA Sect. F. Part F. FO5, FP5.2, FP5.3 FV2.2 F5.0. F5.5 (b)
Class 1 & 10 Buildings. Housing Provisions Health & Amenity BCA Sect.2; Part 2.4. O2.4.6. **Sound Insulation, F2.4.6, P2.4.6 V2.4.6 Health & Amenity** BCA Sect.3.8. **Sound insulation** 3.8.6 (appropriate performance requirements (a) (b))
AS1191 (ISO 140.3) Acoustics - Measurements of airborne sound transmission loss etc.
AS1276 Acoustics - Rating of sound insulation in buildings etc.
AS2253 measurement of the reduction in airborne sound transmission in buildings.

Building Regulations Approved Document E, Building Bulletin 93 - Special Acoustic Conditions for Schools,
BS EN ISO 140.3 Acoustics - Measurement of sound insulation in buildings and of building elements (previous **BS 2750**),
BS 5821 Rating the sound insulation in buildings and building elements (same as **ISO 717/1**)

IBC 2000 International Building Code, Residential Code,
ASTM E90 Standard method for laboratory measurement of airborne sound transmission loss of door panels and door systems (also **E1408**),
ASTM E413 Classification for rating sound insulation,
ASTM E 336 Standard test for measurement of airborne sound insulation in buildings.

NZ BIA Approved Document G (airborne and impact sound)

Fire & Smoke



Class 2-9 Buildings Fire Resistance BCA Sect. C., Part C3, C3.0 to C3.13., Spec.C2.5., Spec.C3.4. Part D. D2.6. D2.7. D2.11
Smoke Hazard Management, BCA Sect. Part E. Bushfire Areas; BCA Sect. G. Part G5
Class 1 & 10 Buildings. Housing Provisions Performance Provisions BCA Sect.2.
Fire Safety Part 2.3 **Bushfire Areas:** P2.3.4 Part 3.7.4. 3.7.4.1 (external doors)
Acceptable Construction Sect. 3. Part 3.6 glazing
AS1530.4 Fire resistance tests of elements of building construction,
AS/NZS1905.1 Components for the protection of openings in fire resistant walls,
AS1851-6 and **AS1851** Section 17 & 18 Maintenance of fire protection equipment,
AS1530.7 Smoke control door and shutter assemblies
AS1735.11 Lifts, escalators and moving walks - Fire rated landing doors.

Building Regulations Approved Document B, ISO834 Fire resistance test - Elements of building construction (various parts),
ISO3008 Fire resistance test - Door and shutter assembly,
BS EN 1634-1 2000 Fire resistance tests for doors and shutter assemblies,
BS 5588 Fire precautions in the design, construction & use of building,
BS 476 Part 20 Method for determination of the fire resistance of elements of construction,
BS 476 Part 22 Methods for determination of the fire resistance of elements of construction of non-load bearing elements of construction,
BS 476 Section 31.1 Method for measuring smoke penetration through door sets & shutter assemblies,
BS 8214 Code of practice for fire door assemblies with non metallic leaves,
ISO CD5925-1 Fire test - Evaluation of performance of smoke control door assemblies; Part 1 Ambient and medium temperature test,
ISO DIS 12472 Fire resistance test - Determination of the efficiency of the intumescent seals with respect to the fire resistance of timber door assemblies.

IBC 2000 International Building Code, Residential Code,
NFPA 101 Life safety Code,
NFPA 105 Recommended practice for the installation of smoke and draft control door assemblies,
ASTM E 2074 Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side- Hinged and Pivoted Swinging Door Assemblies.
UL 108 Fire tests of door assemblies,
UL 10C Fire tests of door assemblies under positive pressure,
UBC 7.210 Smoke and draft control door assemblies,
UL 1784 Standard for safety for air leakage tests for door assemblies,
ASTM E 152 Methods of fire test of door assemblies,
NFPA 252 Standard method of fire tests of door assemblies,
NFPA 80 Installation standard for fire doors & windows, Compatibility of related standards with minor wording differences
ASTM E 136 = UBC 43-1, ASTM E 84 = UL 723 = UBC 42-1 = NFPA 255, ASTM E 110 = UL 263 = UBC 43-1 = NFPA 251.

NZ BIA Approved Document C (Fire Safety).

Access & Mobility



Class 2-9 Buildings BCA Sect. D2, D3. Part D2., D2.15. Spec. D1.12 (f)
Class 1 & 10 Buildings. Housing Provisions Performance Provisions: BCA Sect.2. Part 2.5 (thresholds at door ways)

Building Regulations Approved Document M 'Access and Facilities for Disabled People' and 'Accessible Thresholds in New Housing: Guidelines for House Builders and Designers'.
BS 8300 2001 Design of buildings and their approaches to meet the needs of disabled people. Code of Practice.

IBC 2000 International Building Code, Residential Code & ADAAG
ANSI 117 Building access for people with disability,

AS 1428 Design for access & mobility
AS1735.12 Lifts escalators & moving walks - Facilities for person with disabilities,

NZ BIA Approved Document D (Access routes)