

Comparison Guide: Australian and NZ Standard Method of Measurement 2018 vs NZS4202: Standard Method of Measurement of Building Works (1995)

This guide is a comparison between each section in the *Australian and New Zealand Standard Method of Measurement 2018* and *NZS4202 Standard Method of Measurement of Building Works (1995)*

This guide is intended as a teaching aid and may also be useful for those when pricing using ANZSMM 2018. The guide includes indicative principles or possible differences in philosophy that are applied in the new method of measurement. The comparison sections are condensed, summarised and abbreviated rulings of measurement requirements of the two codes. However, this is not an all-inclusive list of all items to be measured but an additional teaching resource and must be viewed as such. Reference to all relevant clauses in ANZSMM 2018 is essential when teaching measurement or pricing of any trade or section to ensure accurate compliance with this code.

The comparison guide should be read in conjunction with the following resources produced by NZIQS which are available on the NZIQS website:

1. Guidance on the Tabulated Rules Format

The Tabulated Rules guidance notes are to help understand ANZSMM 2018 by knowing what information the different columns contain, how they interact, how to read and interpret them and what to expect in each column.

2. NZ Guidance Notes

The guidance notes are provided to ease the transition from using the NZS4202 method of measurement to using the *Australian and New Zealand Standard Method of Measurement 2018 (ANZSMM 2018)*.

ANZSMM 2018 is based on the *Australian Standard Method of Measurement 6th Edition (ASMM6)*. Some changes have been made to ASMM6 to recognise industry practice in New Zealand.

The guidance notes aid use of this new method of measurement within the New Zealand tendering market. The notes highlight any significant differences between Australian and NZ practice in each trade section and make some recommendations for adaption in NZ. Regional variances have been ignored and larger region trends adopted as the standard. This does not restrict users from applying regional preferences as their style of measurement. The relevant guidance notes have been included at the beginning of each section in this comparison guide.

Queries/feedback

Please contact the NZIQS Executive Director, marilyn.moffatt@nziqs.co.nz 04 4735521, if you have any queries, comments or suggested additions to this comparison guide.

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1. INTRODUCTION, GENERAL RULES AND RECOMMENDATIONS

This section is a must read for anybody using ANZSMM for the first time as it provides a very important over-view of the document and the measurement philosophy. It covers a range of generic explanations that apply to most trade sections and should also be used as a regular reference or reminder as to how different situations are handled. This includes descriptions, measurement, terminology and principles, billing units, circular work, abbreviations and even work in an uncommon situation. Pay attention to the following clauses:

Item 3. Measurement (Page 4)

3.4 refers to standard deduction sizes, however some trades give specific deducible areas, in which case you follow the trade section recommendation.

Item 15. Use of the Tabulated Rules (Page 7)

Explains the use of the tabulated rules set out in ANZSMM 2018. Each section comprises classification tables and supplementary rules: Measurement Rules, Measurement & Prices and Definitions. Refer Tabulated Rules Format for more information on NZIQS website www.nziqs.co.nz

Item 16. Measurement and Prices Clause (Page 8)

16.1 notes that in a schedule of quantities, any amendment to the ANZSMM standard measurement and prices clauses will be stated (in the schedule of quantities). This continues to allow the flexibility to adapt measurement rules to meet certain circumstances. The commonly used generic clause *This schedule of quantities is generally measured in accordance with ANZSMM* may not meet the intent of this deviation rule and is more applicable when less information is presented rather than when more detail is provided.

Item 17. Symbols and Abbreviations (Page 8)

It is essential to be able to distinguish the difference between symbols used, especially “*greater than*” and “*equal to and greater than*”, and “*less than*” and “*equal to and less than*”

1. Introduction, General Rules and Recommendations

2. PRELIMINARIES

The Australian approach is **to identify contractual aspects of the project** plus Preliminary items that have a specific unique identifiable cost for a specific project that cannot be allocated to specific trade and is not a common contractor's overhead.

Nzs4202	ANZSMM 2018
Preliminaries – Section 1	Preliminaries – Section 2
<p>Standard items that are at the start of each trade include:</p> <ol style="list-style-type: none"> 1. Refer to the relevant Drawings, Specification and Contract Documents that apply to this trade. 2. Refer to the Preliminaries section of this Schedule of Quantities that applies to this trade. 3. Refer to Nzs4202 for the rules on which this schedule of Quantities has been based. 	<p>Standard items that are at the start of each trade include:</p> <ol style="list-style-type: none"> 1. Refer to the relevant Drawings, Specification and Contract Documents that apply to this trade. 2. Refer to the Preliminaries section of this Schedule of Quantities that applies to this trade. 3. Refer to ANZSMM Introduction, General Rules and Recommendations, and(section/trade) for Details of Measurement and Prices on which this schedule of Quantities has been based.
<p>The form of contract shall be stated by reference.</p> <p>A general description of the works shall be given, together with the gross floor area where applicable</p> <p>Standard Preliminary and General Items that may require a priceable item depending on the contract include:</p>	<p>The Preliminaries Section is divided into three basic parts, is very extensive and contains 8 classifications in three basic sections as follows:</p>

1.3 MEASUREMENT PROCEDURE

The following shall be itemised when relevant:

1. General and special conditions of contract
2. Legal compliance requirements
3. Statutory fees
4. Insurances
5. Performance bond
6. Programme details
7. Quality assurance requirements
8. Signboards
9. Setting out the works
10. Temporary water
11. Temporary power
12. Temporary telephones
13. Hoardings
14. Temporary access
15. Temporary sheds and offices
16. Client office
17. Temporary toilets
18. Security
19. Supervision
20. Attendance by the contractor
21. Independent contractors work
22. Testing and samples
23. Plant and tools
24. Firefighting equipment
25. Exterior scaffolding
26. Interior scaffolding

Sections 1 to 7 Includes information only items that generally have no direct project costs including:

1. Names of parties
2. Description of the site
3. Description of works
4. Conditions of contract
5. Tender conditions
6. Bills (Schedules) of quantities
7. Contingencies. Note Contingency sums in this section must now be measured in Section 39 Included Sums

Remaining Classifications contain commonly recognised Preliminaries items that are project specific, are identified as an Item and come under the two headings:

Section 8 .1 General Particulars

In this section measure the necessary Contractual Conditions items as required for the project and as regionally appropriate:

Contractual Conditions – items 1-24

1. Working hours
2. Rates and wages and prices of materials
3. Sub-letting
4. Progress & final certificates
5. Variations
6. Dates for commencement and completion
7. Bonus for early completion
8. Liquidated damages
9. Rise and fall

<p>27. Scaffolding lift shafts 28. Temporary screens and protection 29. Protection from weather 30. Drying the building 31. Maintenance and protection of public and private property and services 32. Rubbish removal 33. Cleaning 34. Water removal 35. Implications water levels and springs 36. Maintenance of works 37. Contingencies</p>	<p>10. Exemption from duty Sales and other taxes 11. Issue and return of documents 12. Discrepancies 13. Submission of priced Bills of Quantities 14. Contract agreement stamp 15. Payment of taxes 16. Notices, permits, fees 17. Liability 18. Bonds, guarantees 19. Payment of extra monies 20. Authority approvals 21. Insurance 22. Updating of programme 23. Quality assurance 24. Maintenance and protection of public and private property</p>	
	<p>Section 8.2 General Particulars In this section measure the necessary Site Condition items as required for the project and as regionally appropriate: Site Conditions – Items 25-53</p>	
	<p>25. Charts, schedules 26. Notice Board 27. Setting out works 28. Temporary installations 29. Services 30. Telephone calls 31. Temporary screens, fences, hoardings, guard rails, etc 32. Temporary roads, track,</p>	<p>39. Advertising 40. Footpath levels 41. Plant, equipment & attendant labour 42. Scaffolding 43. Attendance 44. Protection 45. Cleaning, & removal of rubbish</p>

	<p>crossings, etc 33. Temporary sheds, sanitary accommodation etc 34. Duties and attendance 35. Work outside the contract incl. nominated sub-contractors 36. Supplied goods 37. Samples 38. Testing</p>	<p>46. Handing over 47. Defects liability 48. Security 49. Supervision and administration 50. Firefighting equipment 51. Drying 52. Dewatering 53. Works below water level</p>
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3. DEMOLITION

NZ Guidance Notes: 3. Demolition Page 13	Details asbestos removal but ensure you comply with all <u>NZ Health & Safety requirements</u> . Provide a more expansive breakdown of building components if regionally appropriate.
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NZS4202			ANZSMM 2018		
Demolition - Section 2	Unit	Clauses NZS4202	Demolition – Section 3	Unit	Clauses ANZSMM
Rates to include for removing all demolished materials and temporary shoring		2.2.2	Items for inspection, protection, temporary hoardings, screens, credit for recovered items Measurement & pricing includes rubbish removal & temporary shoring	item	P1
Whole building demolished	no	2.3.1	Whole building demolished	item	M1 & 6
Approvals/sealing services/temporary hoardings	no	2.3.4	Removal, sealing, diversion of each service	no	M5, 7 & 8
Demolition items described with sizes	no	2.3.5	Demolition of: Footings Building components Alteration work Removal of windows, doors, fittings, trusses	m ³ m ² /m m no	M9 M2

Separate Sub-trade demolition items		2.3.6	Filling openings, making good, trimming around		M10 & 11
Salvaged items separate		2.3.7	Removal of specific asbestos: for compliance to walls, ceilings to structural steel, pipes	item m ² m	M12
Making good measured		2.3.8	Designed shoring	m ²	M4 & 13
Hazardous substances itemised					
Demolition of: Foundations Paving Concrete Kerbs/gutters Brickwork /Masonry Chimney stacks Timber flooring Roofs Trusses Tooting, notching, halving Windows, doors, fittings Partitions, ceilings Forming openings Specified shoring	m ³ m ² m ³ m m ² no m ² m ² no m no m ² no	2.4.1 TO 2.4.11			

4. GROUNDWORKS

<p>NZ Guidance Notes 4. Groundworks Page 15</p>	<p><i>Tree removals</i> have girth categories.</p> <p><i>Surface excavation</i> -measured m³ - include the area in m².</p> <p><i>Trench and deep excavation</i> - measured in m³ in 1.0m increments.</p> <p>Describe excavation in rock as “extra over”.</p> <p><i>You are required to state the “Extra width for boxing space”.</i> Recommended that boxing space aligns with <u>Health & Safety at Work Act Regulation 24</u> depth staging. Traditional NZ boxing space rules for these depth categories are:</p> <ul style="list-style-type: none"> up to 1.5m – 600mm boxing space 1.5 to 3m – 1.0m boxing space 3m to 6m – 1.3m boxing space <p><i>Planking and Strutting</i> – item to maintain faces of all excavation m² – in 1.0m increments.</p> <p><i>Backfilling</i> - measured in m³ stating total depth in 1m increments.</p> <p><i>Filling</i> – measured up to 250mm in m² and over 250mm in m³.</p> <p><i>Underpinning</i> - single 1.5m working space and total depth identified in 1m increments. Includes 2 items for maintaining faces of excavation. Measure as required to follow Engineers specification.</p> <p><i>Paper & plastic membranes</i> -simplistic approach of one all-inclusive area m² item including edge details. This contrasts with Section 11 Tanking & Waterproof Membrane to wet trades where up to 250mm wide measures in metres – some consistency in rules could be regionally appropriate.</p> <p>Adapt and present a more detailed breakdown as regionally appropriate.</p>
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4.1 GROUNDWORKS/EXCAVATION

NZS4202			ANZSMM 2018		
Excavation - Section 3	Unit	Clauses NZS4202	Groundworks – Section 4.1 Excavation	Unit	Clauses ANZSMM
Rates to include			Items for samples, tests, keeping excavations dry	item	
Site strip m ²	m ²		Site clearance with up to 0.5m girth trees	m ²	M2
			Trees greater than 0.5m girth incremental	no	
			Tree protection	no/item	M3
Top soil m ² with depth stated	m ²		Poisoning	item/m ²	M4
			Top soil to be stockpiled with depth	m ²	
Rock Excavation as “EXTRA VALUE”			Rock Excavation as “EXTRA OVER”		
Surface excavation up to 300mm	m ²		Surface excavation including area – see below for extra working space	m ³ / m ²	
Surface excavation over 300mm in 1.5m stages	m ³				
Deep excavation in 1.5m stages	m ³		Deep excavation – in 1.0m stages – see below for extra working space	m ³	M5
Trench Excavation in 1.5m stages	m ³		Pit excavation – in 1.0m stages Separate up to 1m ²	m ³ m ³ /no	M6

			See below for extra working space		
Extra width for boxing space 0-0.5-1.0-2.0-3.0+ Add Extra 0.2-0.4-0.6-1.0-1.3		3.4.1	Trench Excavation – in 1.0m stages See below for extra working space	m ³	M7
			<i>Recommended extra width for working space (boxing space) as required</i> up to 1.5m – 600mm boxing space 1.5 to 3m – 1.0m boxing space 3m to 6m – 1.3m boxing space		M13-M15 D5, D6
Backfill	m ³		Surface preparation	m ²	D4
Remove surplus spoil from site	m ³		Backfill – in 1.0m stages	m ³	D4
			Remove surplus spoil from site	m ³	M9
			Bored excavation up to 1.0 m deep and 0.5m diameter Other boring in accordance with Section 5.2	no	M10
			Cuttings and tunnelling	m ³	M11
			Surface preparation Reduce levels, for floor slab including thickenings, road pavement Sloping surfaces greater than 30 degrees separate	m ²	M12
			Maintain faces of all excavation	m ²	
			Designed shoring	m ²	M16

4.2 GROUNDWORKS/FILLING AND HARDCORE

NZS4202			ANZSMM 2018		
Excavation - Section 3	Unit	Clauses NZS4202	Groundworks – Section 4.2 Filling & Hardcore	Unit	Clauses ANZSMM
Filling up to 300mm	m ²		Filling beds up to 250mm	m ²	
Filling over 300mm in 1.5m stages	m ³		Filling beds over 250mm deep site & slopes greater than 30 degrees trenches in 1m increments	m ³	M1 & M2 D1
Grading or Blinding	m ²		Surface preparation including slab thickenings separate for slope greater than 30 degrees	m ²	M3 D2
Planking & strutting starts 1.5m deep 0-3.0-4.5-6.0-11.0+	m ²				

4.3 GROUNDWORKS/PAPER AND PLASTIC MEMBRANES

NZS4202			ANZSMM 2018		
Concrete - Section 6	Unit	Clauses NZS4202	Groundworks – Section 4.3 Paper & Plastic Membranes	Unit	Clauses ANZSMM
Damp proof sheeting			Membrane		
Main areas	m ²		Horizontal areas including turn-ups to 500mm	m ²	M1
Extra value for turn ups and turn downs	m		Vertical areas including horizontal up to 500mm wide	m ²	
Penetrations	no		No separate measurement of penetrations or sealing		P1
Damp proof coatings	m ²				
Permanent protection	m ²				

4.4 GROUNDWORKS/UNDERPINNING

NZS4202			ANZSMM 2018		
Underpinning - Section 4	Unit	Clauses NZS4202	Groundworks – Section 4.4 Underpinning	Unit	Clauses ANZSMM
Range of particulars identified			Item to include for temporary supports	item	
Excavation in 1.5 increments with various trench widths – staged sequence stated	m ³		Excavation in 1m increments, ALL 1.5m from face, and to base of work to be underpinned	m ³	M1-M3

Excavation separated above and below footing			Separate excavation below underpinned surface	m ³	
Planking and strutting	m ²		Rock Excavation as "EXTRA OVER"		
Temporary shoring	item		Maintaining faces to two separate excavation stages, stating total depth range	m ²	
Wedging 7 dry packing Up to 300 mm Exceeding 300 mm	m m ²		Cutting for underpinning	m/no	
Cutting for underpinning	m/m ³		Underpinning items of concrete, brickwork etc – as per relevant section	no	M4 P2
			Grouting	m ²	M5
			Designed shoring	m ²	M6

4.5 GROUNDWORKS/ROCK STABILISATION

NZS4202			ANZSMM 2018		
Piling- Section 5	Unit	Clauses NZS4202	Groundworks – Section 4.5 Rock Stabilization	Unit	Clauses ANZSMM
Rock anchors where specified shall be generally measured in accordance with the principles of this section		5.3.10	Item for design data	item	
			Drilling including number of holes	m/no	
			Bolts in 250 mm increments	no	
			Anchors, all inclusive	no	
			Grouting including number of holes	m/no	
			Tightening	no	
			Rock bolts & anchors to specified capacities	no	

5. PILING

NZ Guidance Notes 5. Piling Page 24	Expand for different pile types. Measure in separate sections if regionally appropriate. Some pile lengths grouped in increments of 1m or 2m for fabrication and driving.
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NZS4202			ANZSMM 2018		
Piling- Section 5	Unit	Clauses NZS4202	Piling – Section 5	Unit	Clauses ANZSMM
A range of particular references required Rates to include for shifting equipment			Items for: Equipment on site, Remove equipment from site, Test loading, Trial piles Separate piles for each level driven	item	M1, P1
Handling & pitching	no		Driven piles		M1
Driving	m		Setting up rig	no	
Boring	m		Fabrication, supply incl. 1m waste, handle & pitch:	no	M2
Spoil disposal	no		Timber piles including ringing (& shoes) >5m long in 1m increments	m/no	M3
Liners - temporary/permanent	m		Other piles >10m long in 2m increments	m/no	M4
Cutting tops	no		Driving:		
Provisional items as required	item		Timber piles >5m long in 1m increments	m/no	M6
Tests	sum		Other piles >10m long in 2m increments	m/no	M7
Precast items noted					
Piles – singular/grouping noted					

Shoeing/pointing timber piles	no		Piles – singular/grouping/raking noted		
Banding tops of timber piles	no		Cutting tops	no	
Sheet piling (left or drawn)	m ²		Sheet piling		
Sheet piles Corners/junctions	m		Supply, handle, pitch, drive in 2m increments	m ²	M8 & M9
Equipment item			Extracting sheet piling stating depth	m ²	M10
Temporary excavation noted			Cutting (water explanation)	m	M11
Pumping requirements noted			Splicing	m/no	M12
			Cast in-situ driven		
			Setting up rig	no	
			Piles, driving, liners	m/no	M1
			Permanent liners	m	M2
			Special bases/trimming tops	no	M3 & M4
			Extra reinforcement	no	M5
			Cast in-situ bored		
			Setting up rig	no	
			Boring, max depth, spoil disposal,	m/no	M6 & P3
			Temporary liners	m	
			Permanent liners	m/no	
			Under reamed, socketing in rock, clean out bottom, test bottom,	no	M7 & M8
			Concrete, reinforcement	m ³ /kg	M9 & P4

6. CONCRETE

<p>NZ Guidance Notes</p> <p>6. Concrete</p> <p>Page 29</p>	<p>Footings have an area classification.</p> <p>m³ grouping of slabs in 100mm thick stages with area in m².</p> <p>m³ grouping of walls in 50mm thick stages with area in m².</p> <p>Add additional items If regionally appropriate.</p>
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NZS4202			ANZSMM 2018		
Concrete Work- Section 6	Unit	Clauses NZS4202	Concrete – Section 6	Unit	Clauses ANZSMM
Rates include screeds, joints. Curing			Items for samples, test, protection & curing Note deduction limitations, levels, separation of concrete & reinforcing, placement method,	item	M1 – M4 & P1 M6
Concrete widths and thicknesses stated	m ³		Note location levels, strength, reinforced/unreinforced concrete widths and thicknesses stated	m ³	
Deductions 0.01 m ² sectional area and 0.2m ² circular			Footings including bases, piles caps, beams – less or more than 1m ² categories	m ³	
Curing, surface treatment including to falls	m ²		Slabs, pavings, roads – flat, graded, sloped, cambered – in 100 mm thick stages - with area	m ³ /m ²	M7 M8

Note location, strength, reinforced/unreinforced etc stated			Walls in 50mm thick stages including attached columns & piers - with area	m ³ /m ²	
Bolts, clips, sleeves	no		Isolated columns, beams, lintels	m ³	M9
Separate items for: Foundations, machine bases, slabs with thickness, beams, columns, piers, walls with thickness, bands, cornices, stairs, channels,	m ³		Casings to steelwork Isolated columns, beams, lintels Stairs including landings, strings, beams	m ³ m ³	
Upstands n.e. 0.05m ²	m		Copings, kerbs including length Plinths, bases	m ³ /m m ³	M10 M11
Blinding	m ²		Ducts, channels, box drains Greater than 250mm internal width or depth, or not isolated Up to 250mm internal width or depth and where isolated Angles, ends, intersections	m ³ m no.	M12 M13
			Bearing blocks including formwork - up to .25m ³	No.	M14
			Expansion joints, water stops	m	M15 & D1
			Scabbling – Up to 250 mm wide and greater Cutting concrete Drilling concrete	m/m ² m no.	M16, M17, M18 M19

			Kerbs, gutters Sump openings	m no.	
			Blinding – Horizontal, sloping, vertical including necessary formwork	m ²	D2. D3 & D4
			Integral finishes off wood, rubber, steel sloping – In increments – - Up to 250 mm wide and greater	m/m ²	M20 & M21 P2
			Surface hammering & blasting - Up to 250 mm wide and greater	m/m ²	M22/P3
SPRAYED CONCRETE - SECTION 7			SPRAYED CONCRETE IN ANZSMM		
Includes screeds, waste, joints, curing			Describe concrete in Concrete Section 6.1 as compacted, sprayed.....		M4
Concrete stating thickness	m ³				
Finished face treatment	m ²				
Difficult access noted					
Concrete principles followed -Integral items incorporated					
Ties, anchors	no				
Ext angles	m				
Formwork principles followed					

7. FORMWORK

<p>NZ Guidance Notes</p> <p>7. Formwork</p> <p>Page 35</p>	<p>Measured in m² and in m for 250mm wide or less.</p> <p>All column and beam formwork -measured in m² (no narrow widths).</p> <p>Slabs greater than 200mm thick stated in soffit formwork.</p> <p>Soffit formwork greater than 3m high above finished floor level measured in 1m increments.</p> <p>Note increments and rules for measuring penetrations.</p> <p>Note increments for formations (chases, grooves, rebates, etc).</p> <p>Note separate rules for permanent metal formwork.</p> <p>Note separate rules for slip form formwork.</p>
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NZS4202			ANZSMM 2018		
Concrete/Formwork- Section 6.4	Unit	Clauses NZS4202	Formwork – Section 7	Unit	Clauses ANZSMM
Formwork for each type – profiled surface flat	m ²		Items for engineer certification of formal design, drawings	item	
Deductions 2.0m ²					
After treatment	m ²				
Permanent formwork separate					
Single sided formwork 1m high separate					
Confined space formwork separate					
Formwork to cambers separate					

<p>Fillets exceeding 50mm not exceeding 300 on face</p> <p>Fillets exceeding 300mm on face</p>	<p>m m²</p>		<p>Describe formwork left in position</p> <p>Measured by class, specified finish levels in m² and in m for 250mm wide or less except all column and beam formwork -measured in m²</p> <p>Measure net contact surface</p> <p>Measure separately formwork to produce a permanent or specified finish (fairface)</p> <p>Measure formwork separately for: Footings Slab soffits – horizontal – sloping under & over 15degrees, permanently cambered</p> <p>Slabs greater than 200mm thick stated in soffit formwork. Soffit formwork higher than 3m above finished floor level in 1m increments.</p>	<p>m²/m</p>	<p>M1 M2, M5 – M7, P1, D1</p> <p>M3 M4</p> <p>M8 & M9</p>
<p>Rake, circular, moulded edges</p>	<p>m</p>		<p>Chamfers and splayed internal angles 50-250 wide on face</p>	<p>m</p>	

Separation of formwork to: Various vertical surfaces Curved and sloping surfaces Soffits of slabs (200mm thick+/3m height in 1m stages) separately) Beams & lintels (3m height in 1m stages) separately) Small surfaces Cornices, mouldings	m ² no m		Rake and circular cutting	m	
Boxing narrow widths to sides or soffits of concrete, reveals of openings 2m ² and over in categories 0-100, 101-200, 201-300 wide	m		Formwork to: Walls, Columns, Piers Beams sides & soffits (stating where greater than 750 high) To stair soffits, edges, etc Top formwork to slope 15 degrees or more	m ²	M10 & 11 M12 & 13 D3
Formwork to openings less than 2m ²	no		Surfaces of cornices & mouldings	m ²	
Groves, chases, expansion joints, water stops	m		Waffle form formwork or similar Supports & decking	no m ²	M14
Joints exceeding 300mm wide	m ²		50mm Increments for formations (chases, grooves, rebates, etc).	m	M15
			Increments and rules for measuring rectangular and circular penetrations	no	
			Permanent Metal Formwork Section 7.2		M1 – M8

			Separate comprehensive rules for permanent metal formwork.		
			Sip form Construction Section 7.3 Separate rules for slip form formwork		M1 – M3

8. REINFORCEMENT

<p>NZ Guidance Notes</p> <p>8. Reinforcement</p> <p>Page 43</p>	<p>Use kg where measured in tonnes.</p> <p>Provide separate items for each size of bars for NZ increments.</p> <p>Include laps to all bars - as shown, nominated by Engineer (or at 8 metre centres for NZ).</p> <p>Add lap length to the overall length measured.</p>
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NZS4202			ANZSMM 2018		
Reinforcing Steel- Section 9	Unit	Clauses NZS4202	Reinforcement – Section 8	Unit	Clauses ANZSMM
Rates to includes bends, cranking, hosting placing, chairs, tie wire, support bars required but not shown No rolling margin added		9.2, 9.3	Item for bending schedules where not supplied free to the builder stating quantities of all reinforcement Note level and splice point classifications	item	M1 & M2
Each bar size separate inclusive of hooks and laps Laps @ 8m centres Bars exceeding 10m in 2m stages Welding measured	kg no	9.4	Includes placing, chairs, tie wire, support bars, No rolling margin added Where laps not documented, describe but don't measure		P1 M5 M4
Mesh net area – laps described Deductions 2m ² and over Notching less than 2m ²	m ² no	9.5	Measure separately special labours or treatment Measure laps where shown	t t	M3 M6

Rake/circular cutting, construction joints, cranking, bending	m		Group bars by level separately for: up to 16 dia. 17-36 dia. 37 dia. and above NOTE NZ recommendation to separate each size of bars and measure in kg	t	M1 & 2
			Fabric (Mesh) Measure laps as shown on drawings. Trench mesh stating width	m ² m	M8
			Special clamps	no	

9. PRESTRESSING

NZ Guidance Notes 9. Prestressing Page 45	Incremental grouping for core or duct items. Assume Post Tension work has similar items.
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NZS4202			ANZSMM 2018		
Concrete/Pre-Stressed & Post-Tensioned Work - Section 6.7	Unit	Clauses NZS4202	Prestressing – Section 9	Unit	Clauses ANZSMM
Prestressed & Post Tension General description including temporary supports		6.7.1	Items for Expendable Items Tensioning methods separated <i>Concrete, formwork, reinforcing, measured separately</i>	item	M1 M2
<i>Detailed quantities of standard items</i>		6.7.2	Cores or ducts Forming, grouting, sealing cores, ducts or grooves - incremental grouping 0-5, then 2m increments – include temporary supports Filling recesses and shear keys Stressing steel - supply and delivery Installing cables Anchorages Tensioning	m no kg no no no no no	M3 M4
<i>Proprietary Flooring</i>		6.8			

Main components	m ²				
Deductions 1.0m ² and over					
Rake cutting	m				
Openings, fitting around columns	no				
Insitu concrete topping	m ²				
Formwork as needed					

10. PRECAST CONCRETE

NZ Guidance Notes 10. Precast Concrete Page 47	No detailed quantities or separate fixings are measured. Mass (weight) and lifting height stated. Include lifting eyes as required. Add additional items if regionally required.
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NZS4202			ANZSMM 2018		
Precast Concrete - Section 8	Unit	Clauses NZS4202	Precast Concrete – Section 10	Unit	Clauses ANZSMM
Rates includes moulds, lifting eyes, temporary supports, cambers			Items for specimens in tests, shop drawings, design work Measurement includes formwork, rebates grooves, reinforcement, filling pockets surface finish, items cast in. Floor level of location of units noted.	item	M1 M2
Detailed quantities of each unit given Optional separate fixing Continuous sills, etc Fixings Welding Sealants, etc	 m no m/no m		Precast wall panels, columns, beams, slab units, star flights, lintels mass of each unit in 0.5t increments Highest lift noted Mass and height of the heaviest lift Links with formwork	no/t	M3

			Bedding and caulking		
			In-situ formwork, temporary supports Span, height above ground	no	
			Coping, cornice, kerbs	m/no	
			Sills & Treads Mitres	no	
PROPRIETARY FLOORING - SECTION 6.8			Crib block walls	m ²	
			Loose erection fittings	no	
			Field welding	m/no	M4
			Caulking and backing	m	

11. TANKING & WATERPROOFING MEMBRANE

<p>NZ Guidance Notes 11. Tanking and Waterproof Membranes Page 49</p>	<p>Measure polythene sheet and DPM to wet trades m² in this section with up to 250mm wide in m.</p>
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NZS4202			ANZSMM 2018		
Mastic Asphalt & Similar Treatments - Section 11	Unit	Clauses NZS4202	Tanking & Waterproof Membranes— Section 11	Unit	Clauses ANZSMM
<p>Rates include temporary screeds, grounds Up to 1m working space measured separately Horizontal, vertical, slope, subject to water pressure separate Sectional work identified Deductions for openings 0.5m² and over</p>			<p>Items for guarantees, water table level Up to 1m working space measured separately Horizontal, vertical, slope separate</p>	<p>item</p>	<p>M1</p>
<p>Mastic Asphalt, and similar treatments Incorporated felt or expanded metal, identified</p>	<p>m²</p>		<p>Asphalt, bituminous, roll-on, trowel-on membranes Up to 250mm wide</p>	<p>m² m</p>	<p>M2</p>
<p>Over/around pockets etc</p>	<p>no</p>		<p>Internal & external angles, fillets</p>	<p>m</p>	<p>M3</p>
<p>Paving/roof coverings separate</p>	<p>m²</p>		<p>Over/around pockets etc Collars</p>	<p>no</p>	<p>M4 & D1</p>
<p>Gutters, channels, coves, angles, fillets</p>			<p>Skirtings, coves, turnups</p>	<p>m</p>	

Extra value when linked to areas	m				
Full value when separate	m				
Outlets, sumps, collars	no.				
Permanent protection	m ²		Asphalt damp-proof course - as above	m/ m ²	

12. MASONRY

<p>NZ Guidance Notes</p> <p>12. Masonry</p> <p>(Brickwork and Blockwork)</p> <p>Page 51</p>	<p>The terminologies used in these sections refer to UK and Australian trades. Use regionally appropriate terminology.</p> <p>Measure net area in m² including pointing, deducting all special blocks.</p> <p>Measure skins of cavity walls.</p> <p>Measure all special blocks in m inclusive of all angles, corners, ends, etc.</p> <p>Measure extra labour for setbacks or projections.</p>
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NZS4202			ANZSMM 2018		
Brickwork - Section 12 Blockwork – Section 13	Unit	Clauses NZS4202	Masonry – Section 12	Unit	Clauses ANZSMM
<p>Brickwork</p> <p>Rates include fractional sizes, vertical straight cutting, clean out openings, cleaning, temporary support</p>	12.2		<p>COMBINES BRICK & BLOCKWORK</p> <p>Items for Samples. Sample panels, Tests</p> <p>Note deductions, opening sizes and material requirements</p>	item	M1 – M3 & P1
<p>Separation for type, thickness, fairface, both skins to cavities, location, ext.,int.</p> <p>Deductions > 0.2m²</p> <p>Forming Cavities</p> <p>Closing cavities</p>	<p>m²</p> <p>m²</p> <p>m</p>	<p>12.3 & 12.4</p> <p>12.4.3</p> <p>12.4.2</p> <p>12.4.15</p>	<p>Brickwork/blockwork types separated to levels walls, skins of cavity walls, circular, tapered, batters, fairface, common, facing, including pointing</p> <p>Includes facings to 2 courses below finished GL unless otherwise detailed</p>	m ²	<p>M4, M5 & 7</p> <p>M9, 10</p> <p>M6</p>

Surface treatment	m ²	12.4.4	includes wall ties to cavity work		
Forming int. & ext. angles	m	12.4.5	includes cavity closes includes cleaning surfaces - Note D11 requires separate cleaning item Measure overhand work separate Deduct strings, sills, lintels, corbels and similar items Deductions $\geq 1\text{m}^2$		M10 M1 & M2 M2
Horizontal, raking & circular cutting	m	12.4.10	FULL VALUE		
Raking out joints	m	12.4.32	Purpose made blocks including sills, bond beams, lintels, angles - m	m	M8
Pointing to groves	m	12.4.5			
Centering to openings	m/no	12.4.14			
Damp proof coursing	m	12.4.9	Piers, attached or isolated	m ² / m	M11, D1
Flaunching	m	12.4.11	Filling openings, with number	m ² / no	
Metal bonding	m	12.4.7			
Ornamentation and patterned work	no/m ²	12.4.23			
Chimney related items including main chimney, flues, flue liners, parging, firebrick linings, fire surrounds, boiler seating	no/m/ m ²	12.4.24 TO 12.4.30	Fireplace chimney Projections – plinths, friezes, strings, corbels Extra labour only setting courses back or forward	no m m	M12 M13
Lintels, arches – Extra value	no	12.4.16			
Projections, pilasters, steps, plinths, strings, cornice – mitre, ends	m/no	12.4.17 TO 12.4.20	Backing to masonry Vaulting	m m ² /m	
Caps, bases, neckings	no	12.4.22	Thickenings to existing walls	m ²	M14
Copings – angles ramps, ends	m/no	12.4.21	Paving, treads, risers	m ² /m	

Rod reinforcement	kg	12.4.12	Panels - greater than 1m ² separate	m ² / no	M15, D4
Concrete to cavity and cells	m ² /m	12.4.13	Flush bands- greater than 500mm high separate Arches	m ² /m no	M16. D5
Closing cavities	m	12.4.15	Quoins, sills, copings including angles, ends, ramps, etc Pier caps	m no	D6
Horizontal, raking & circular cutting	m	12.4.10	Kerbs, mouldings – mitres, ends, angles, etc Bricks to Boilers - various Beam & lintel blocks – stating no of openings.	m	M17
Forming chases, rebated reveals		12.4.31		no	
Raking out joints		12.4.32			
Pointing to groves		12.4.6		m / m ² & no m /no	
Holes	no	12.4.33	Key blocks, corbels, panels less than 1m ²	no	
Air bricks	no	12.4.34			
			Control & expansion joints	m	
Blockwork			Chases and cutting grooves	m	M18, D7
Rates include fractional sizes, vertical straight cutting, clean out, cleaning, temporary support		13.2			
Separation for type, thickness, both skins to cavities, location, ext.-int. height work rises Mortar, jointing/filled/un-filled/	m ²	13.3	Raking, splay, circular cutting	m	

Inclusive of all blocks Deductions > 0.4m ² Casings, piers columns Setbacks, projections, pattern work	m m/no	13.4 13.4.17 13.4.18			
EXTRA VALUE Bond beams, Sill, Lintels, Reveals, Plain end, Corners, T- junction, Half-high Blocks	m	13.4.5	Angles- Irregular, chamfered, rounded, moulded, birdsmouth – ends, stop	m /no	
Forming cavity Closing cavities	m ² m	13.4.2 13.4.19	Cavity ties, including T's & junctions	m ² /m	M19
Horizontal, raking & circular cutting Forming chases Raking out joints Pointing to groves	m	13.4.9 13.4.20 13.4.21 13.4.7	Concrete filling Cavity wall Hollow blocks Columns, beams, lintels	m ³ m ² m	M20
Damp proof coursing Flaunching	m	13.4.10 13.4.11	Reinforcing steel - kg	T	M21 D8
			Bonding to existing, including cutting pockets Levelling Pinning new load	m m m	D9
Control joints – m	m	13.4.6	Glass Blocks Panels 1m ² or less	m ² no	

			preparing sills clearance joints panels precast into concrete isolated blocks	m m no no	D10
Capping Blocks	m		Damp proof course in varying positions Greater than 1m girth In 250 increments up to 1m	m ² m	M22
Centering for openings	m/no	13.4.16	Ant caps	no	
Surface treatment	m ²	13.4.4	Sundries Bagging, washing, cleaning down Keying existing work Special caulking Metal mesh/strip reinforcement Parging, coring Flue linings	m ² m ² m m m m / no	D11
Holes	no	13.4.22	Precast Flue blocks	no	
Ventilation blocks	no	13.4.23	Stays, straps Vents	no no	
Concrete fill to block walls	m ²	13.4.13			
Concrete to vertical & horizontal cores	m	13.4.14			
Concrete fill to cavities	m ²	13.4.15			

Metal bonding	m	13.4.8			
Reinforcing steel	kg	13.4.12			
Build-in metalwork	no	13.4.16			

13. STONEWORK

<p>NZ Guidance Notes 13. Stonework Page 61</p>	<p>The terminologies used in these sections refer to UK and Australian trades. Use regionally appropriate terminology.</p> <p>Measure 500 mm or less thick stonework in m².</p> <p>Measure over 500 thick stonework in m³ and include face area m².</p> <p>Note increments for stone sizes.</p> <p>Note extensive range of other measurement rules.</p>
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NZS4202			ANZSMM 2018		
Stone Masonry - Section 14	Unit	Clauses NZS4202	Stonework – Section 13	Unit	Clauses ANZSMM
Rates for straight cutting, cleaning		14.2	Items for samples, tests, and extra hoisting where work above 6m - in 6m increments	item	
<p>Stonework</p> <p>Ext. Int., Floors, Walls described with mortar</p> <p>Up to 300 mm wide</p> <p>Height to which work rises stated</p> <p>Circular work separate</p> <p>Isolated areas 1m² or less separate</p> <p>Deductions 0.2m² and over</p>	<p>m²</p> <p>m</p>	14.3	<p>Coursed work height stated – min/max</p> <p>Face finishing & pointing described</p> <p>Where relevant use Section 12 covering Masonry rules</p> <p>Measure work up to 500 mm thick separately</p> <p>Measure work over 500 mm thick separately including face area</p>	<p>m²</p>	<p>M1</p> <p>M2</p> <p>M3</p> <p>M4</p>

Cutting around openings up to 0.2m ²	no			m ³ /m ²	M4
Corners, sills, skirtings, treads, risers	m		State if stone is set on natural bed or not		M5
Mitres, ends, stop ends	no		Measure separately stones 2 m or greater in length or height		M6
Rake & circular cutting	m		Measure separately stones 1m ³ or greater in 0.25m ³ increments		M7
Ceilings for openings	no		Smallest rectangles measured		M8
	m		Comprehensive description for circular work		M9
Bench tops	no		Footings	m ² /m ³	M1 & M2
Letters, numbers, etc	no				
Notchings	no				
Arches with fixings	no				
Applied treatment	m ²		Walls	m ² /m ³	
DPC	m		Wall linings	m ²	M3
Rake out joints	m		Quoins, pilasters, jambs, caps & bases, springers, keystones, etc., columns	m ² /m ³	M5 & M5
Pointing	m ²		Fireplace & chimney stacks	no	M6 & M7
Sealants, gaskets, joints	m		Piers & plinths - up to 500mm high /and above	m/m ²	
Grouting to cavities	m ²		Lintels	no	M8
			Arches – biggest rectangle include support		

			Quoins, bands, strings – fully described	m	M9
			Panels - up to 1m ² /and above	no/m ²	
			Landings	m ²	
			Fair edge	m	
			Notches	no	
			Treads, risers & steps – Length where greater than 2m	m	
			Exposed ends/steps, winders	no	
			Hearths	no	
			Kerbs, fenders, sills. borders, shelving, divisions	m	
			Architraves, archivolt, copings	m	
			Joints, angles, kneelers, bonders, apex stones, templates, notches	no	M10
			Perforations, mortices	no	D1
			Polishing	no	D2
			Angles, levelling up, joints		D3, D4, D5
			Support brackets	no	
			Mullions, transoms, reveal linings	m	
			Stooling, balusters, finials, crockets, terminals	no	

			Exposed edges	m	M11
			Chamfers, splays, grooves, fluting	no	
			Stonework checked to fit steel, etc	m/no	M12
			Running ornaments	m	
			Angle enrichments, carving, sculpture, boasting,	no	M13
			Paving	m ²	M14
			Skirting, coves	m	
			Artificial stone, terracotta	m ²	M1

14. STRUCTURAL

<p>NZ Guidance Notes 14. Structural Steel Page 71</p>	<p>Use kg where measured in tonnes.</p> <p>Separately measure main steel sections and state type, size, number and length.</p> <p>Steel lengths rounded to 0.1m length for mass calculations.</p> <p>Identify if welded, bolted or riveted.</p> <p>Measure items for attached and loose connection plates.</p> <p>Site welding and bolts are measured.</p> <p>Steel is classified by levels.</p> <p>Measure Item for heaviest lift and height.</p> <p>Measure as regionally appropriate including hollow section and tube in m.</p>
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NZS4202			ANZSMM 2018		
Structural Steel - Section 10	Unit	Clauses NZS4202	Structural Steel – Section 14	Unit	Clauses ANZSMM
Rates include supply, fabrication, delivery, hoisting erection Shop drawings	item		Items for drawings, temporary braces, samples, tests, weld inspections, special; shop assembly, heaviest lift mass, height above or below GL and highest lift mass stated, Note no deductions and net mass measured with no rolling margin	item	M1 & M2

			Identify location and if steel welded, bolted or riveted Cranked, irregular shaped and camber described Classify work by type, levels, etc		M3, M4 & M8 M5 M7
Items grouped under headings - portals, trusses Main items Cold rolled Hollow sections Galvanised separate	kg m/kg m/kg	10.3	All steel sections and plates measured in multiples of 0.1m in length for calculation purposes Columns, beams, rafters, rigid frames Purlins, girts, bracing Temporary bracing Attached & loose connections, fitted stiffeners Bearing plates built into walls	t t item no	M6 M9 D1, D2 M10, D3 M11& M12 D4 D5
			Rigid frames, trusses, lattice girders, open web joists	t	M13 & M14
			Verandas & Awnings Suspension rods, turnbuckles	t no	M15
			Staircases Cranking	t no	M16
			Rails Fish plates, hook bolts, dog spikes, rail clips	t no	M18
			Proprietary purlins, girts & accessories	m	M19, D6

Holes 0-20, 21-30, 31 upward separate	no	10.4	Bolts, attachments, assemblies, studs,	no	M20, D6, D7
Cambers described	no		Ties	no	M21, D8
Splay cut, notch	no		Wrapping – wire, fabric, woven wire	t/m ² /m	D9
Circular/profile cutting	m		Wedges & grouting	m ²	M22
Welding /riveting	m/no		Surface treatment – priming, phosphating, hot dip galv., metal spraying	t	M23
Brackets, cleats	no/kg		Field work		
Bolts	no		Holes, cutting, notching		
			Welding	no	
		Riveting	m/no	M24	
		Welded ties	no	M25	
			Holes, sinkings to ductwork & similar	no	M26 & M27

15. METALWORK

NZ Guidance Notes 15. Metalwork Page 77	Note extensive range of items and rules. As regionally appropriate, describe and measure in No or m giving the weight.
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NZS4202			ANZSMM 2018		
Metalwork- Section 15	Unit	Clauses NZS4202	Metalwork – Section 15	Unit	Clauses ANZSMM
Rates include supply, fabrication, delivery, hoisting fixing Full description <i>with detailed quantities</i> Inclusive of welding. Site work assembly other than bolting described Castings, supports, frames, etc Sheathing, panelling and labours Shop drawings	m/no no no m ² /m item	15.2 15.3/15.4 15.4	Item for shop drawings, samples, tests Provide a full description including metal, finish, welding, priming as section 29, fixing Full range of metalwork items listed Ducts, sheet metal items Ducts, sheet metal, widths 250mm width Cutting & labours to sheet metal	item no/m ² m ² m m/no	M1 -M6

16. ROOFING

NZ Guidance Notes 16. Roofing Page 84	General roofing turnups and turndowns included in main area m ² . Describe roofing turnups and turndowns in m (NOT extra value). Includes gutters and downpipes in measurement rules. Sarking is measured in Carpentry section.
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NZS4202			ANZSMM 2018		
Roofing - Section 22	Unit	Clauses NZS4202	Roofing – Section 16	Unit	Clauses ANZSMM
Rates to include Laps and fixings		22.2.2	Items for guarantees	item	
Roofing –Material, laps, fixings, supports, pre-finished or applied treatment Pitch and height of eaves stated Includes forming rolls, seams Turn ups and turn downs included Separate > 15m lengths Battens included Walls separate from roof Dormers separated Isolated areas separate	m ²	22.3.1,2 22.2.1 22.4.3.1 22.3.3 22.4.3.6 22.4.3.1 22.4.3.2	Note different rules for roofing materials that have separate sections. Net area measured MEMBRANE/ASPHALT Membrane roofing, asphalt paving Net area - Separate roof, wall, awnings, soffit, fascia, dormers, curved conical shape Separately slopes > 10 degrees Up to 250 wide	m ² m	M1 M2 M3 P1 M4

Deductions for translucent sheet Deductions > 2m ²		22.4.4.1	Turn ups & turn downs separate full value	m	M5
		22.3.1			
		22.4.4.9	Collars and outlets		
Where Deductions < 2.0 m ² item measured separately	no	24.4.3.1	Gutters & kerbs	no	M6
		22.4.3.7	Include related felt & metal bedding, bases and surface treatment	m	M7
		22.4.3.8			
Curved conical shape	m ²	22.4.3.4	SHEET ROOFING		
Translucent sheets	m ² /no	22.4.3.5	Flat, troughed, corrugated, translucent		
Netting	m ²	22.4.2	Net area inclusive of turn ups & downs	m ²	M8, P2
Paper, wrap	m ²		Separately slopes > 22.5 degrees		
			Girth of curved sheeting		M9, D1
			Rake & circular cutting	m	
			Turn ups & downs including bending	m	M10, D2
			Rolled edges, turned ends, ridge bending, curving sheets	m	
			Penetrations	no	
EXTRA VALUE Forming turn ups and turn downs	m	22.4.3.10	Slate, shingle, tile	m ²	
	m	22.4.3.11	Includes battens		
Folding, capping, stoppings	no	22.4.3.11	Separately slopes > 22.5 degrees		
Stop ends	m ²	22.4.3.3	Lacing of tiles	m ²	M11
EXTRA VALUE specially formed sheets	m	22.4.3.12	Ridge, hip tiles	m	
EXTRA VALUE Turning into chases, beads, fillets			Mitres, ends, intersections	no	
			Close cut mitred hips or angles, verges	m	

Rake and circular cutting	m	22.4.3.9	Manholes, skylights, ventilators, special sheets, different tiles Continuous ventilators	no m	M12
Flashings to ridge, valley, hips – girth/bends	m	22.3.4	Cappings, bird proofing	m	M13
		22.4.4.1	Insulation (NOT NZ PRACTICE)	m ²	M14
		22.4.4.3	Sheet sarking including turnups, safety mesh (NOT NZ PRACTISE)	m ²	M15
Covers etc to rolls	m	22.4.3.11			
Flashings into chases	m	22.4.4.5	Flashings – stating bends and girth in 250mm increments.	m	M15
Stop ends, angles, mitres	no	22.4.4.2			
		22.4.4.6	Metal slates, soakers for pipes etc	no	
		22.4.3.11			
Flashings to penetrations through roof	no	22.4.4.8	Gutters, various	m	M17
To flues and vents		22.4.4	Ends, joints, angles, outlets, sumps	no	
Wire balloons, grating, vermin proofing	no/m	22.4.4.7	Downpipes, ducts, flues Bends, junctions, shoes, RWH, offsets, connections, special jointing	m no	M18 M19
Skylights with flashings	no	22.4.5	Lagging, protective coatings	m	M20
Glazing as Glazing Section 36					
Ventilators	no	22.4.6	Metal Sumps	no	
Gutters, spouting downpipes as per plumbing section 23		22.4.7	Proprietary fascia	m	M21
Membrane roofing			Grilles, gratings, sleeves	no	

Inclusive of turn downs, turn ups as basic rules	m ²				
EXTRA VALUE Forming turn ups and turn downs	m	22.4.8.1	Separation strips	m	M22, D5
Membrane roofing to gutters, valleys	m	22.4.8.2			

17. FACADE SYSTEMS

NZ Guidance Notes 17. Façade Systems Page 92	This trade section can be made up of several trades in NZ and should be measured in those trade sections as appropriate. A range of separate items listed is to be measured in m ² , m and no
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NZS4202			ANZSMM 2018		
Metal Windows & Doors- Section 16	Unit	Clauses NZS4202	Façade Systems – Section 17	Unit	Clauses ANZSMM
Curtain walling.....scheduled giving quantities of the principal component parts.		16.4.2	Items for shop drawings, samples, tests Items primed & painted before delivery identified	item	M1, P1
			Facade Systems Proprietary system Spandrel panels of differing materials Opening sashes Integral doors Flashings –girths in 250mm increments Junctions with other materials	m ² m ² no no m m	M2, P2 P3
			Composite Façade Systems Non-standard Detailed framing	m ² t/m ²	M3, P4 M4

			Other framing	m ²	M5, P5
			Spandrel panels of differing materials	m ²	P6
			Opening sashes	no	
			Integral doors	no	
			Flashings – girths in 250mm increments	m	
			Junctions with other materials	m	
			Curtain Walling		
			Curtain walling system all inclusive	m ²	P7
			Spandrel or infill panels of differing materials measured as EXTRA OVER	m ²	P8
			Opening sashes	no	
			Integral doors including frames	no	
			Flashings –girths in 250mm increments	m	
			Junctions with other materials	m	

18. WINDOWS

<p>NZ Guidance Notes</p> <p>18. Windows</p> <p>Page 95</p>	<p>This trade covers timber and metal windows.</p> <p>Includes flashings in m, girth in 250mm increments.</p> <p>Includes glass m² with Section 19 Glazing rules.</p> <p>Measure as regionally appropriate.</p>
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NZS4202			ANZSMM 2018		
Metal Windows & Doors- Section 16	Unit	Clauses NZS4202	Windows – Section 18	Unit	Clauses ANZSMM
Rates include sealants, gaskets, draught strip not shown		16.2	Items for drawings, samples, tests Items primed & painted before delivery identified	item	M1, P1
Metal Windows and appropriate reveal linings	no	16.4.1	Metal windows includes glazing/fly screens Section 19 Glazing rules apply	no/m ²	
Curtain walling noted in ANZSMM Facade Systems Section 17		16.4.2			
Metal Doors with frames noted in ANZSMM Doors Section 24	no	16.4.3	Metal louvre frames Metal louvre blades including no Metal louvred windows ALL including glazing	no m/no no	

Structural mullions	m		Timber windows - standard	no	D1
Associated flashings	m		includes glazing/ sash balances where double hung Non- standard timber windows measured as section 20 Carpentry		M2
Sealants gaskets etc	m	16.4.7	Timber louvre blades including no Non- standard timber louvre blades measured as section 20 Carpentry	m/no	M3 M4
All necessary hardware included			Folding glass door including frames	no	
All necessary glazing in accordance with Glazing Section 36			Flashings stating girth in 250mm increments	m	
Joinery-Windows- Section 19	Unit	Clauses NZS4202			
Full description including number of lights, sashes and hanging	no	19.4.1.1			
Each item with					
detailed quantities of members	m	9.4.1.2			
Sashes	no.				
Solid panels	m ²				

19. GLAZING

19. Glazing Page 97	Glazing- measured in m ² in increments of 0.5 to 2.5, then 2.5 increments.
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NZS4202			ANZSMM 2018		
Glazing - Section 36	Unit	Clauses NZS4202	Glazing – Section 19	Unit	Clauses ANZSMM
Rates to include cleaning on completion		36.2	Item for shop drawings	item	
All Glass Irregular shapes biggest rectangle Float glass in increments of 0-2m ² , exceeding 2 up to 6m ² , exceeding 6m ² Glass with 3m edge separate All other glass no classification Curved/bent glazing Circular cutting Preformed bedding for glass	m ² no m m		Glass Type and fixing Irregular shapes biggest rectangle In increments of 0.5m ² up to 2.5m ² Above 2.5m ² in 2.5m ² stages	m ²	M1, P1 M2 M3
Lead lights and copperlights	no		Lead and copper lights - no of panes Cames, details described Saddle bars	m ² /no m	M4, M5

Double & multiple glazing – each layer measured Sealed double glazing units	m ² no		Double glazed factory made - no of panes	m ² /no	D1
			South lights – no of panes Height above ground floor Glazing bars	m ² /no m	
			Applied reflective finish - no of panes	m ² /no	
			Acrylic / polycarbonate sheeting - no of panes	m ² /no	M6, D2
			Glazing material assemblies of walls/screens	no	M7
Louvre blades- no of panes	m/no		Louvre blades - no of panes	m/no	
Mirrors, closed doors, slides, splash backs Silvering embossing, sand-blasting, etc	no no		Mirrors, silvered glass	no	
Holes, openings - include size of pane Polishing, grinding, bevelling edges in perimeter categories of 0-4, 4-6, 6-9, exceeding 9 m Jointing of glass	no m m		Face processing, slots, holes Edge processing (note exceptions), Jointing of glass Scallops, internal mitres	no m no	M8
Glass blocks measured as for block work with jointing system described	m ²	36.4.11	Glass blocks measured as for Masonry	m ²	M9

20. CARPENTRY

<p>20. Carpentry Page 100</p>	<p>Building wrap and cavity systems to be measured in this section in m².</p> <p>Structural timbers greater than 3.6 m in increments measured as: 3.6m-6m, 6m-7.5m, 7.5-9m.</p> <p>Linings- measured in m², measure in m where less than 250mm wide except where caused by openings.</p> <p>Some labours described where required with relevant classification section.</p> <p>Herringbone strutting could be substituted with solid blocking.</p> <p>Bolts-state length in increments of 100mm.</p>
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NZS4202			ANZSMM 2018		
Carpentry - Section 17	Unit	Clauses NZS4202	Carpentry – Section 20	Unit	Clauses ANZSMM
Rates to include for fixing, cutting, waste, mitres, filling. Timber as NZS3631 Green, rough sawn, call size, gauged, dressed, or finished size stated Deductions for linings etc 1m ² and larger		17.2 17.3	Timber type, grade, sizes sawn or dressed, treatment Describe tongued, housed, glued, secret fixed Fixing other than nailing identified Describe joinery items primed or prefinished		M1, M2 M3, M6 M4 M7 P1
			Describe labours with relevant classifications		M5, D1
All timber Timber exceeding 6m in 300mm stages	m		Location noted, sizes grouped Plates, joists, studs, purlins, rafters, etc.	m	M8, M9

State if passings are measured or not Herringbone strutting actual length measured			Structural timber classifications 0-3.6, 3.7-6, 6.1-7.5, 7.6-9 or increments to suit local requirements Nogging, bridging, herringbone strutting	m	M10, M11
Bolts, fixings etc other than nails measured DPC	no m		Prefabricated roof trusses fully described including heights	no	M12 – M14, P2
Trusses Metalwork, fixings	no no		Angle, fillets, grounds, battens, fascia boards., etc	m	
Paper, insulation blankets, batts, netting - gross area over timber Battens	m ² m	17.4.5 17.4.6	Insulation - gross area over timber Walls & ceilings	m ²	M15, D2
Flooring, linings, boarding, sheathing etc Perimeter cutting to diagonal boards Mitres, internal angles Rake & circular cutting Forming recesses Shaped preformed poly. Not exceeding 300 wide On-site shaping – extra value	m ² m m m no m ² m m	17.4.7	Boarding – floors, walls, gutters, fascia, nosings – Up to 250 wide Rake & circular cutting, mitres Sumps, traps Nosings	m ² m m no m	
Sanding – small areas separate	m		Sanding, sealing, polishing	m ²	
Finishings	m	17.4.8	Lining, panelling, casings, screens including joint coverings	m ²	

Boarders, battens, cornices, fascia, skirtings, architraves, rails Grilles, vents, shapings, mouldings	no		Up to 250 wide	m	M18
			Panels up to 1m ²	no	M19
			Reveals to openings separate		M20
			Irregular shapes separate		M21
			Form openings	no	
			Rake & circular cutting, angles, exposed edges, edge strips	m	
			Mouldings, skirtings, cappings	m	D3
			Caps, bases	no	M22
			Framed Screens	m ²	
			Windows that are non-standard including sash gear	no	M23, D4
			Normal windows as per Section 18		
			Door frames & linings; shop fronts, sidelights, fan lights	no	
			Window lining, jambs, sills, pelmets	m no	
			Mitres, returned ends	no	
			Mouldings & nosings	m	
			Hatches, panel, manholes	no	
			Nonstandard timber Louvres	no	M24, M25, D5
			Louvre panels		

			Skirtings, architraves, moulds, etc	m	
			Internal & external stair flights, landings, newels	no	
			Balustrading, handrails	m	
			Ramps, bends, wreaths, mitres, ends, brackets, etc	no	
			Fascias, linings, plinths	m	
			Bearers, toe boards, fascias	m	M26, D6
			Bolts, power fixings, anchors Drilling steel when not shown	no	M27, M28 P3
Laminated Timber - Section 18	Unit	Clauses NZS4202	NO APPARENT EQUIVALENT OF LAMINATED TIMBER IN ANZSMM ASSUME BASIC RULES OF CARPENTRY – SECTION 20	Unit	Clauses ANZSMM
Rates to include for manufacture and delivery, hoisting fixing, fitting cutting, boring, protection		18.2			
Laminated unit fully describe with height for erection included	no	18.3 &4			

Take deliver hoist and fix - size and approximate mass stated	no	18.4			
Continuous members, stating number and range of lengths	m				
_ Floors	m ²				
Metalwork and fixings as metalwork trade	no				
Inspection and testing	sum				

21. PARTITIONS

21. Partitions Page 108	<p>Prefabricated modular (toilet) partitions all-inclusive m² or no if 500mm wide or less.</p> <p>Metal Framing to walls and partitions (can include lining) –measure in 1m height increments in m²; corners, angles et. In m and openings in No</p> <p>Composite partitions- measure in 1m high increments in m²; corners, angles etc. m and openings no</p> <p>Fire Rated Partitions with all linings- measure in 1m height increments in m²; corners, angles etc m and openings no</p> <p>Measure as regionally appropriate.</p>
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NZS4202			ANZSMM 2018		
Carpentry/ Proprietary Toilet Screens - Section 17.4.9	Unit	Clauses NZS4202	Partitions – Section 21	Unit	Clauses ANZSMM
			Items for shop drawings, samples, tests Composite panels include timber or metal	item	M1
Proprietary Toilet screens, all-inclusive	no	17.4.9	Metal framing to walls and partitions, - includes composite timber/metal – some including linings – includes intersections - in 1m height increments Angles, corners, ends Form openings fort doors, hatches	m ²	M2
Doors complete with hinges & hardware	no				
Head rails & supports	m				
Support posts, feet	no				
Panels forming ducts	no				
				m no	M3

			Proprietary girts, bridging, tie rods including all drillings, bolts	m	M4
Other partitions are covered by standard carpentry trade rules			Prefabricated modular partitions	m ²	M5
			- inclusive of angles, corner, intersections, skirtings, cappings, etc - 500mm wide or less - Doors, hatches including forming trim, opening, frames, hardware	no no	M6
			Toilet and shower cubicles	no	
			Overheated channel fittings	m	
			Doors complete	no	
			Composite partitions	m ²	M7 & M8
			- in 1m height increments - sealing perimeter junctions - angles, corners, free ends, end fixings, intersections with other partitions -- Form openings for doors, hatches, etc	m m m no	M9
			Acoustic partitions	m ²	M10 & M11
			- in 1m height increments - sealing perimeter junctions - angles, corners, free ends, end fixings, intersections with other partitions -- Form openings for doors, hatches, etc	m m m no	M12

			Fire rated partitions - in 1m height increments - sealing perimeter junctions - angles, corners, free ends, end fixings, intersections with other partitions - Form openings for doors, hatches, etc	m ² m m m no	M13 & M14 M15
			Operable walls fully described with integral doors etc	no	M16

22. SUSPENDED CEILINGS

22. Suspended Ceilings Page 114	Describe the ceiling height and void if over 3.5m above Finished Floor Level. Work around sprinklers etc. is included in m ² rate. Forming big openings measured as no
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NZS4202			ANZSMM 2018		
Grid Suspended Ceilings - Section 31	Unit	Clauses NZS4202	Suspended Ceilings – Section 22	Unit	Clauses ANZSMM
Rates include straight cutting, seismic and light support - Seismic classification stated Note if services in ceiling space		31.2 & 3	Items for shop drawings, samples, tests Includes cutting & making good around sprinkler heads, pipes	items	P1
Suspended ceiling suspension system	m ²	31.4.1	Suspended grid ceiling system &		
System trimmed for lights etc -extra value	no	31.4.2	Coffered ceilings complete with infill panels	m ²	D1
Edge trim	m	31.4.3	in stages of 1 m height increments	m	M1
Column/opening trim extra value	no		in 250mm girth increments up to 1m girth		
			Rake and circular cutting		
			Forming openings for panels, recesses, etc	m	
			Junctions of ceilings with walls, columns, pelmets	no	
				m	

Ceiling tiles or infill panels	m ²	31.4.4	Bulkhead	m ²	
Deductions for whole tiles/panels only			Beam casings in 250mm girth increments up to 1m girth	m	
Openings, penetrations, sprinklers	no	31.4.5	Rake and circular cutting	m	
Rake and circular cutting	m	31.4.6	Forming openings for panels, recesses, etc	no	
Seismic breaks, trunking	m	31.4.7			
Shop drawings	no	31.4.8			
			Cornices that are not part of the grid system all inclusive of angles, corners etc	m	D2

23. ACCESS FLOORS

23. Access Floors Page 116	Note –a unique trade. Measure work up to 250mm wide in m, greater than 250mm in m ² . Access panels etc- measure in no
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NZS4202			ANZSMM 2018		
Carpentry/Computer Floors - Section 17.4.10	Unit	Clauses NZS4202	Access Floors – Section 23	Unit	Clauses ANZSMM
			Items for shop drawings and samples	items	
Scheduled appropriate to the details provided		17.4.10	Access floor systems complete	m ²	M1
			- 500mm wide or less	m	
			Rake and circular cutting	m	M2
			Panels, hatches, ramps	no	
		Trim around isolated columns etc	no		

24. DOORS

24. Doors Page 117	<p>Includes metal and timber doors.</p> <p>Includes hinges or track.</p> <p>Include glass with Section 19 Glazing rules.</p> <p>Frames are in the carpentry section.</p> <p>Measure grouping as regionally appropriate.</p>
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NZS4202			ANZSMM 2018		
Metal Windows and Doors- Section 16	Unit	Clauses NZS4202	Doors – Section 24	Unit	Clauses ANZSMM
			Items for drawings, samples, tests Pre-primed or painted noted	items	M1
Metal Doors with frames Structural mullions Flashings Sealant, gaskets Hardware	no	16.4.3	Doors including Metal Fireproof, Strong-room, Timber doors, Roller shutters Gates –	no	P1

			all inclusive of glass, (Section 19 rules) and grilles, guides and tracks, hinges and fastenings		
			Non-integral metal door frames with hardware	no	D1
Joinery Doors- Section 19.4.2					
Timber Doors	no	19.4.2.1&2			
Frames to timber doors	no	19.4.2.3			

25. HARDWARE

<p>25. Hardware Page 118</p>	<p>Includes, locks, latches, handles. Includes sash geared openers. Measure grouping as regionally appropriate.</p>
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NZS4202			ANZSMM 2018		
Carpentry/Hardware - Section 17.4.12	Unit	Clauses NZS4202	Hardware – Section 25	Unit	Clauses ANZSMM
All hardware inclusive of fixings	no	17.4.12	Item for master key requirements	items	
Fanlight and window sash geared openers fully described with heights			Locks, latches, closers, push plates, handles, bolts, kick plates, fully described complete with fixings grouped according to location	No	M1, M2, M3 M4 D1
Separate fixing of hardware items covered by sums	no		Fanlight and window sash geared openers fully described with heights	n.	
Separate item for master key	no				
Removal of hardware for painting stated					

26. APPLIED FINISHES, RENDER & TEXTURED FINISHES

<p>26. Applied Finishes, Render and Textured Finishes Page 119</p>	<p>Includes multi trades.</p> <p>Areas of walls – measured 50mm higher where suspended ceilings.</p> <p>Ceilings include height 1m increments above 3.5m.</p> <p>Provide preamble that edge labours included in m² rates.</p> <p>Stopping to be measured separately.</p> <p>Note special measurement rules to existing work.</p> <p>Measure grouping as regionally appropriate.</p>
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NZS4202			ANZSMM 2018		
Solid Plaster- Section 29 Plasterboard Linings – Section 30	Unit	Clauses NZS4202	Applied Finishes, Render & Textured Finishes – Section 26	Unit	Clauses ANZSMM
Solid Plaster Rates to include for temporary rules, grounds, screeds, making good around pipes etc			Items for samples or special model	items	

<p>Description includes ext. or int., number of coats, thickness, preparation of surfaces description of surface applied to and finish. Walls, floors, ceilings and sloping separate.</p> <p>Plaster on lath includes lathing.</p> <p>Plaster to Isolated beams and columns separate, integral with walls or ceilings</p> <p>Deductions 0.5m² and over</p> <p>Plaster to:</p> <p style="padding-left: 20px;">Main areas</p> <p style="padding-left: 20px;">Narrow widths, 0-150mm, 151- 300mm</p> <p>previously included in areas measured extra value</p> <p style="padding-left: 20px;">Isolated areas not exceeding 1.0m² separate</p> <p style="padding-left: 20px;">Mechanically applied separate</p>		29.3 & 29.4	<p>Net areas, separated Interior & exterior, where different finish, integrally coloured and waterproofed, to existing surfaces, patterned or more than one colour with composition described</p>		<p>M1 - M4, M6, M8, M9</p>
		29.4.8			
	m ²	29.3.3			
	m	29.4.7			
	no	29.4.9 29.4.10			
<p>Arrises, drips, edges, junctions</p> <p>Enrichments, cornices, mouldings, sills etc</p> <p>Treads, risers, stringers, skirtings</p>	m m m	29.4.11 29.4.12 29.4.13.	<p>Isolated surfaces up to 1 m² separate</p> <p>Narrow widths up to 250mm wide</p> <p>Base treatment measured separately</p>	m ² m	<p>M5</p> <p>M7</p> <p>M10</p>
<p>Circular, ornamental, etc</p> <p>Letters, numerals, etc</p>	no no	29.4.14 29.4.15	<p>Areas of walls – measured 50mm higher where suspended ceilings.</p> <p>Provide preamble that edge labours included in m² rates</p> <p>Note deduction rules</p>		<p>M1</p> <p>P1</p> <p>M2</p>

Plasterboard Linings Rates to include for penetrations, cutouts, making good		30.2.1			
Description includes performance, thickness, prefinish, fixings, stopping details Typical wall height stated		30.2.2 30.12.3	In-situ Applied finishes to: Walls (various), parapet backs, ceilings including sloping, coffered, stair soffits To ceilings include height 1m increments above 3.5m. Columns, piers, beams Stopping to be measured separately Girth all structural steel framing	m ² m ² /m/no m ²	
Plaster board type to walls, ceilings including sloping, stairwells, beams, columns, inside ducts & lift shaft. Layers & fixing noted Stopping separate	m ² m ²	30.3.1 30.4.1 30.3.2	Cornices & mouldings, sills, copings, metal trim	m	
Deductions 1.0m ² and over Grounds, battens, hangers, separate		30.3.3 30.3.4	Special rules to existing walls, making good In-situ finishes to: Walls (various), parapet backs, ceilings including sloping, coffered, stair soffits To ceilings include height 1m increments above 3.5m. Columns, piers, beams Stopping to be measured separately	m ² /m/no m ² m ² /m/no m ²	M3

			Girth all structural steel framing		M4
Circular work separate		30.3.5	Plasterboard, Fibrous plaster, Plaster acoustic tiles to: Walls, ceilings including supporting timber or metalwork where applicable Beam & column casings Columns, pilasters, casings to stanchions, Cornices & mouldings	m ² m no	
Narrow widths, 0-150mm, 151- 300mm previously included in areas measured extra value	m	30.4.2	Cornices & mouldings, stopping to internal angle, metal trim	m	M5 & M6 M3 &M4
Beams columns, duct casings cast in one piece	m	30.4.3			
Rake and circular cutting	m	30.4.4	Arches, domes, vents	no	
Cutting and fitting in rebates/grooves	m	30.4.5	Plasterboard, Fibrous plaster, Plaster acoustic tiles to: In-situ finishes to: Walls (various), parapet backs, ceilings including sloping, coffered, stair soffits To ceilings include height 1m increments above 3.5m. Columns, piers, beams Stopping to be measured separately	m ² m ² /m/no m ²	M1, M2, P1, D1

			Girth all structural steel framing		
Cornices, mouldings, coves / angles, ends, Projections, inserts	m/no no	30.4.6 30.4.7	Metal lathing Walls, ceilings Separate where no supporting timber Rake & circular cutting Cornices & mouldings	m ² m	M3
Corners & edge beads battens or strips, joints to other materials	m	30.4.8			
Stopping Forming angles, joints fair edges including stopping	m ² m	30.4.9.	Plasterboard, Fibrous plaster, Plaster acoustic tiles to: In-situ finishes to: Walls (various), parapet backs, ceilings including sloping, coffered, stair soffits To ceilings include height 1m increments above 3.5m. Columns, piers, beams Stopping to be measured separately Girth all structural steel framing	m ² m ² /m/no m ²	M1 D1 M2
Special treatment to acoustic and fire rated walls Treatment to fittings, etc	m ² no	30.4.10	Cornices & mouldings		

27. TILING, SLAB & PAVING

<p>27. Tiling, Slab and Paving Page 124</p>	<p>Measure isolated surfaces 1m² or less separately.</p> <p>Measure narrow widths 250mm wide or less in m.</p> <p>Measure edge tiles if appropriate.</p> <p>Measure work around pipes, toilet fittings if appropriate.</p> <p>Measure pointing if appropriate.</p> <p>Skirtings –measure in m, inclusive of corners, angles.</p>
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NZS4202			ANZSMM 2018		
Tiling- Section 32 Terrazzo – Section 33	Unit	Clauses NZS4202	Tiling, Slab & Paving – Section 27	Unit	Clauses ANZSMM
Rates include straight cut, protection, cleaning		32.2	<p>Items for samples or special models</p> <p>Measurement & prices deemed to included forcutting & making good around pipes fixtures</p> <p>Measure separately net area, interior/exterior, to existing surfaces, pattern or more than one colour, different kind or finish</p> <p>Measure separately</p> <p>Isolated surfaces $\leq 1\text{m}^2$</p>	<p>items</p> <p>m²</p> <p>m²</p> <p>m²</p>	<p>P1</p> <p>M1-M3,M5, M7</p> <p>M4</p> <p>M6</p>

			<p>≥250mm wide</p> <p>Treatment of base</p> <p>Minimum Deductions - no mention so use generic rules</p>		M8
Tiling, ext/int/to falls separate	m ²	32.3	Main areas: Walls, ceilings, columns, piers, beams	m ²	M1
Deductions ≥ 0.2m ²		32.4.6			
Isolated areas not exceeding 1m ² separate		32.4.7	Floors: horizontal, graded, up to and greater than 15 degrees slope – separate for interrupted surfaces	m ²	M2
Narrow widths not exceed 300 wide	m	32.3.4		m	D1
Integral beams, columns included with walls ceiling			Rake & circular cutting	m ²	
Isolated beams, columns separate	m/m ²	32.4.4	Stair case:	m	
Skirtings, moulding bands	m		Landings	m	
Treads, risers, stringers	m		Rake & circular cutting	no	
Integral bands - Extra value	m		Various edges, treads, risers	m	
Expansion joints	m	32.4.13	Winders		
			Skirtings : raking & vertical including interiors & exterior angles	m	
Rake and circular cutting	m	32.4.9	Kerbs & sills	m	
Circular work separate					
Cutting around pipes	no		Channels, ducts, spoon drains	m	
			Stop ends, outlets	no	
Polishing	m ²	32.4.15	Flush panels	no	

			Edges: round, chamfered, rebated Coves: cappings, mouldings, skirtings, architraves, rounded external angles	m m	M3 &4
			Fittings: Soap & toilet paper holders, towel rail ends, vents Mat sinkings, covers	no	
			Precast slab thresholds including number of sections	m/no	M5
			Division strips & inserts	m	
TERRAZZO – SECTION 33					
Rates include moulds and casings for precast, grinding & polishing exposed face, protection & cleaning		33.2			
Terrazzo	m ²	33.3			
Anti-static, coloured, patterned separate Deductions > 0.2m ²	m	33.3.2			
Narrow widths not exceed 300 wide measured extra value	m	33.4.1			
Partition panels, column facings, etc	no				
Skirtings, coves, sills -	m				
Treads, nosings	no	TO			
Fire surrounds, tops, etc ornamental work	no				
Joint strips	m	33.4.9			

Polished edges, sinkings, external angles	m	33.4.6			
Holes, building in, making good around pipes	no	33.4.7			

28. CARPET & RESILIENT FINISHES

<p>28. Carpet and Resilient Finishes Page 129</p>	<p>Underlays etc. included in main item. Measure isolated surfaces 1m² or less separately. Measure narrow widths 250mm wide or less separately in m². Use generic deductible openings size. Note if surface areas are interrupted. Skirtings – measure in m, inclusive of corners, angles. No separate cleaning item measured.</p>
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NZS4202			ANZSMM 2018		
Floor Coverings - Section 34	Unit	Clauses NZS4202	Carpet & Resilient Finishes– Section 28	Unit	Clauses ANZSMM
Preambles Material, underlay, substrate, fixing/jointing, pattern matching		34.2.1	Item for samples or special models No reference to cutting around pipes etc so assume similar to tiling which states <i>Measurement & prices deemed to included forcutting & making good around pipes fixtures</i>	items	
Rates to include Preparation of surfaces, adhesives, scribing to abutting surfaces		34.2.2	Measurement includes for vacuuming, mopping, cleaning, covering, protecting & masking surfaces		

Main areas - floors, walls, ceilings, int. & ext. separate Inclusive of turn-ups inclusive of isolated narrow widths Deductions for tiles > 0.5 m ² Deductions for sheeting >2 m ²	m ²	34.3.1 34.3.2 34.3.4	Main areas - floors, walls, ceilings, interior/exterior to existing surfaces, pattern or more than one colour, different kind or finish separate including underlay \geq 250mm wide separately Minimum Deductions - no mention so use generic <u>Measure treatment of base separately</u>	m ² m ²	M1- M3,M5,M7 -M9 M6 M8
Isolated areas < 2 m ² separate	m ²	34.2.3	Isolated areas \leq 1 m ² separate	m ²	M4
EXTRA VALUE- < 300 mm wide	m	34.4.3	Floors Deemed horizontal Separate floors graded, sloped up to and above 15 degrees Interrupted surfaces identified	m ²	M9
EXTRA VALUE- turn ups External/internal angles to turn ups	m no	34.4.4	Preparation of existing surfaces	m ²	
Rake and circular cutting	m	34.4.1	Rake and circular cutting	m	
Forming around openings/obstructions <0.5 m ²	no	34.2.2	Metal trim of ext. or int. angles & edges	m	
Separate skirtings EXTRA VALUE Change direction/ends	m no	34.4.7	Staircases Landings Rake & Circular cutting	m ² m	

			Edges, treads, risers	m	
Edgings, thresholds	m	34.4.5	Skirtings – includes coves & int. & ext. angles		
Stair treads, risers, stringers	m	34.4.6	Kerbs, sills, channels, ducts Stop ends, outlets	m no	
Bench tops	m ²	34.4.8	Spoon drains	m	
Handrails EXTRA VALUE Change direction/ends	m no	34.4.9	Bands	m	
			Panels	no	
			Special edges	m	
			Coves, cappings, mouldings, skirtings, coved internal angles, architraves, rounded external angles	m	
			Mat sinkings, covers	no	

29. PAINTING

<p>29. Painting Page 133</p>	<p>Quantities are taken from other trades with common separation of location.</p> <p>Generally measured in m² inclusive of associated returns, reveals, etc.</p> <p>Measure separately narrow widths not exceeding 250mm width or girth only where different specification from surrounding work such as fascia, barge skirting.</p> <p>Glazed areas- measured flat overall m².</p> <p>Reveal linings, sill boards, architraves, etc. to doors & windows included with m² doors and window items.</p> <p>Profiled areas in m² follow profile.</p> <p>State height where flat or sloping ceiling soffit is greater than 3.5m above finished floor level.</p>
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NZS4202			ANZSMM 2018		
Painting & Specialist Finishes - Section 35	Unit	Clauses NZS4202	Painting – Section 29	Unit	Clauses ANZSMM
Rates include preparatory work, stopping, cutting in, masking.			<p>Items for sample finishes, colours</p> <p>Measurement & prices deemed to included forscaffolding, between coat preparation, protection, etc</p> <p>Measure separately net profile area, type of product & finish, interior/exterior, to existing surfaces, part-coloured or picked work,</p>	<p>items</p> <p>m²</p> <p>m²</p>	<p>P1</p> <p>M1 - M7</p>

			<p>Measure separately</p> <p>Isolated surfaces $\leq 1\text{m}^2$</p> <p>Narrow widths $\geq 250\text{mm}$ width or girth only where different specification from surrounding work</p> <p>Treatment of base</p> <p>Minimum Deductions - no mention so use generic rules</p>		M8
<p>Painting</p> <p>0-150 wide</p> <p>150-300 wide</p> <p>Confined spaces separate</p> <p>Deductions 1m^2 and over</p> <p>glazed areas m^2 flat overall</p> <p>isolated areas less than 1m^2</p>	<p>m^2</p> <p>m</p> <p>m</p> <p>m^2</p> <p>no</p>		<p>To walls & Ceilings</p> <p>Areas in m^2 inclusive of associated returns, reveals, etc., sill boards, architraves, etc. to Walls.</p> <p>Ceilings flat or sloping – state if soffit is greater than 3.5m above finished floor level.</p> <p>Doors including glazed</p> <p>Windows- measured flat overall</p> <p>Reveals, etc., sill boards, architraves, etc. to doors & windows</p>	<p>m^2</p> <p>m^2</p> <p>m^2</p> <p>m^2</p> <p>m^2</p> <p>m^2</p>	<p>M9</p> <p>M10</p> <p>M11</p> <p>M12</p>
<p>Line between colour changes</p> <p>Back priming</p> <p>Trellis/pickets</p> <p>Preservatives - as for paint</p>	<p>m</p> <p>m^2</p> <p>m^2</p>		<p>Roller shutters and grilles - flat overall</p> <p>Balustrades, railing, fencing – flat overall</p> <p>Fascias, barges, purlins pelmets, cornices, skirtings, handrails, cappings, gutters, pipes flashings and more</p>	<p>m^2</p> <p>m^2</p> <p>m^2</p>	<p>M13</p> <p>M14</p>

			Rainwater heads, access manholes, hatches, letter boxes	no	
			Carved surfaces, rosettyes	no	M15
Wall paper	m ²		Sign writing. Letters, etc.	no	
Stripping and preparing for new work	m ²				
Borders	m				
Special polishing including preparation, Polishing frames, handrail girth	m ² m		Paper, vinyl, fabric hanging Borders	m ² m	M16
Signwriting	no		Polishing follows painting rules	no	M17
Gilding	m ² /m /no				

30. JOINERY

30. Joinery Page 137	Remember doors, windows and hardware are separate sections. No detailed quantities required but fully describe component parts and labours. Include all hardware. Use different grouping and additional detail where regionally appropriate.
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NZS4202			ANZSMM 2018		
Joinery - Section 19	Unit	Clauses NZS4202	Joinery – Section 30	Unit	Clauses ANZSMM
Rates to include all fixings, samples ting, notching etc site measurement, site fixings. taking deliver and fixing		19.2.1	Items for shop drawing, samples Materials identified including treatment, grades, joints, fixings other than nails, primed or pre-finished. Describe labours with relevant classification item. Includes rebating, grooving, splaying, bevelling, moulding.	items	M1 - M5, M7 & M8 M6, D1
Joinery Items to include detailed quantities Hinges/integral metalwork Clear size designation	no	19.3.1 TO	Joinery fittings -fully describe including hardware & openings comprising Lockers, cabinets, shelving & bench units and tops	no	

Fixings		19.3.4			
Windows - detailed quantities with description of no of lights, sashes, method of hanging Components m, sashes no, panels m ²	no	19.4.1	Shelving, seats, etc Shelves, divisions, seats, ladder frame, Legs, gallows brackets - described including edge strips & component parts	no	
Doors -fully described	no	19.4.2. 1 &2	Fittings to special design Cupboards, benches, splash backs, bookcases, tables, counters, blackboards, pin boards including all hardware.	no	
Doorframes	no	19.4.2.3			
Stairs detailed quantities	no	19.4.3.2			
Handrails, balusters	m				
Change in direction – extra value	no				
Special ends	no				
Fittings detailed quantities including doors Components m, doors no, carcass etc m ² or m	no	19.4.4			
Panel work as Carpentry principles Angles in m					
Veneered pressings as bench tops	no				

31. FURNITURE, FITTINGS & EQUIPMENT

31. Furniture, Fittings and Equipment Page 139	This is a new section focusing on proprietary furniture & equipment. Includes hospital items, curtains, soft furnishings, art work. Include all hardware.
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NZS4202			ANZSMM 2018		
	Unit	Clauses NZS4202	Furniture, Fittings & Equipment – Section 31	Unit	Clauses ANZSMM
No obvious parallel trade allocation. Most of these items would be in the carpentry specification and therefore be in the carpentry trade of the schedule			Items for shop drawings, samples Note type of material & work finish required Include all hardware Include manufacturers name. serial numbers	items	M1 & M2 M3
			Proprietary furniture including hardware Lockers, cabinets, shelving units, compactus, bench units, cupboards, benches, book cabinets, tables, counters, desks, workstations including partitions, chairs, sofa/lounges, beds, free standing light fittings	no	M4

			Equipment Medical, kitchen, media, sports, vending machines, theatre & studio equipment	no	
			Curtains and blinds Curtains, blinds, theatrical curtains, medical screens	no/m ²	M5, M6 M7
			Sundries Soft furnishings Miscellaneous furniture and fittings Art work	no	M8

32. HYDRAULICS

<p>32. Hydraulics Page 142</p>	<p>Think of all pipework trades as in this section.</p> <p>Identify basis of pipework measured where no pipeline drawings provided.</p> <p>Subtrades are measured separately if regionally appropriate.</p> <p>Measurement of pipe fittings larger than 32mm dia.</p> <p>Amend presentation and identify where larger than 25mm dia. pipe fittings. measurement is regionally more appropriate.</p> <p>Same rules as pipework for separate measurement of lagging.</p> <p>Only fire rated sleeves measured.</p> <p>Some special connections/joints measured.</p> <p>Separate pipework between branches and stacks.</p> <p>Note special rules for glass pipework.</p> <p>Specially designed brackets or hangers are measured.</p> <p>Trenches included with pipework in ground unless regionally appropriate to separate.</p>
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NZS4202			ANZSMM 2018		
See Mechanical Services - Section 25 detailed under ANZSMM mechanical – Section 35 below	Unit	Clauses NZS4202	Hydraulics – Section 32	Unit	Clauses ANZSMM
			Identify basis of pipework measured where no installation drawings provided.		

			Items for consents, testing, sterilizing, pipe identification	items	
			Separation of different systems, materials, surface treated or painted and fixing methodology. Separate work outside boundary		M1 - M5 M6 & M7
			Pipework Pipework inclusive of fittings where < 32 dia ≥32 da pipework ≥32 da fittings to pipework Measure pipework separate: laid underground including excavation; embedded in concrete including concrete fixed to walls suspended from soffits Don't separate branches from main stacks	m m no	M8 M10 M9
			Measure pipework and all fittings and connections to glass pipe	m/no	M11
			Specially designed brackets or hangers and fixings	no	M12

			1m long connections, special joints, isolated joints & connections irrespective of pipe size to traps & cocks – note the alternative	no	M13, M14, M15
			Fire rated pipe sleeves to walls & floors – in 250 mm increments	no	
			Lagging to pipe dia, where >32mm	m	M16
			Anti-siphon connection arms	no	D3
			Traps, floor gullies, flap valves, cowls, gratings, stays, connections, cocks, valves, hydrants, hose reels, combined outlet sets	no	M17
			Tank trays, separate where greater than 4m ²	no/m ²	M18
			Fixtures, appliances including baths, basins, sinks, tubs, WC suits, urinals, bidets, cisterns, drinking fountains, shower bases	no	
			Pumps, hot water units, hydrotherms, gauges including pipes and associated equipment	no	
			Meter pits, path boxes including pipe riser, rings, excavation concrete etc	no	
			Rock Excavation as per Drainage Section 33		M19

33. DRAINAGE

33. Drainage Page 147	<p>Trenches included with pipework in ground unless regionally appropriate to separate.</p> <p>Trenches – measured in 1m depth increments.</p> <p>Fittings to all pipework measured.</p> <p>Manholes- measured in 500mm depth increments.</p> <p>Note specific rock excavation measurement requirements.</p>
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NZS4202			ANZSMM 2018		
Drainage - Section 24	Unit	Clauses NZS4202	Drainage – Section 33	Unit	Clauses ANZSMM
Rates for trenching all inclusive with pumping Trenches, foul & storm-water pipes separate		24.2 24.3	Identify basis of pipework measured where no installation drawings provided. Items for consents, testing, keeping excavations dry	items	
Trenches 1.5 increments Backfill with hardfill/imported Extra Value Rock excavation Extra Value with conditions Roads/footpaths Extra Value	m m m ³ m	24.4	Separate different drainage systems including work outside boundary Pipework includes excavation and associated work measured over fittings		M1 - M3 M4 & D1

Pipework in depth stages of 1.5m	m	M2	Drainage pipework:		
Special connections	no	24.4.5	In trench in 1m increments with bedding & backfill, fully described	m	M5, D1- D3
Fittings – junctions bends Extra Value	no	TO	Suspended with supports	no	
Cover/surrounds to pipework- reinforcement	m/kg	24.4.12	Laid in tunnel	m	
Gulley/grease traps	no		Fittings – bends, junctions, reducers	no	M6
Manholes with excavation etc	no		Concrete encasing including additional excavation	m	
Sump pumps etc	no		Broken metal, gravel surround included in description of the pipe		
Approvals/ Drawings/ Testing	Items	24.4.13	Gullies, traps , grease traps, non-return valves	no	
			Sealing discs, clear outs, grates	no	
			Drain connections to sumps, inspection chambers, manholes, septic tanks, street channels, existing drains, public mains	no	
			Soak away drains	m	
			Manholes/chambers in 500mm depth increments, inspection chambers, interceptor traps, septic tanks, incl. excavation etc	no	M7
			Excavation in rock in 1m increments with additional width/depth factors	m ³	M8 – M11
			Pits with special measurement rules	m ³	D4 M12

34. ELECTRICAL INSTALLATIONS

<p>34. Electrical Installations Page 151</p>	<p>Trenches included with cables in ground unless regionally appropriate to separate.</p> <p>Cable carriers- measured in m with fittings 150mm wide or bigger measured in No</p> <p>Conduit - measured in m with fittings bigger than 100mm dia. measured in No</p> <p>Special boxes to conduit - measured in No</p> <p>Cable lengths include tails per m (mains & sub-mains).</p> <p>Cable measurements per circuit- measured in No (unless actual cable runs shown for cable lengths).</p> <p>All switches, outlets and fittings - measured in No</p> <p>Light fittings include lamps and tubes.</p>
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NZS4202			ANZSMM 2018		
Electrical Services - Section 28	Unit	Clauses NZS4202	Electrical Installations– Section 34	Unit	Clauses ANZSMM
Rates include forming basic holes, cables, wiring & fittings, conduits & fittings, roses, holders, flex, identification			Items for compliance, notices & charges testing, samples, and as-installed drawings Cables in ground include for all excavation etc	items	P2 M1 & M2

			NOTE M2 Identifies all appropriate sub headings of work categories Identification of primed, painted, surface treatment including painting. Fixing requirements identified		M3 – M5 M6
			Statutory Authority work Mains connection	item item	M7 M8
			Generator and major equipment	no	
Boards – MSB & DB	no	28.4.1	Switch gear - MSB DB - with all components	no	M2, P4, D1 & D2
Trunking, cable trays	m	24.3.1	Cable carriers		
Changes in direction, branches, etc	no	24.3.2	Trunking, trays, ladders	m/no	P5
Hangers, supports etc included in rates		24.3.3	Ends, bends, junctions, etc	no	
EXCEPT where carrying multiple trays etc	no		EXCEPT where carriers 150 wide or less when fittings included	m	M9
			Conduit		
			Including fittings up to 100 dia	m	
			Greater than 100 dia., fittings separate	m/no	M10, P6
			In trench include excavation	m	
			Conduit sleeves (fire rated separate)	no	M16
Mains and sub-mains	m		Cables where identified – (mains, sub-main?)	m	M11, M12
Include 2m extra tails			Include 0.5m extra at switches etc		P7
In ground includes excavation					M13

Cable terminations, joints, taps			Include 1m extra at major switchgear In ground includes excavation Cable terminations, joints, taps	no	M14 M14, P8, D4
Circuits fully described	no	28.4.4	Circuits & sub-circuits Includes conduit and cabling	no	M17, P9, D5
			Bus ducts and bus ways Elbows, ends, tees, taps etc	m no	M18, P10
			Earthing conductors Cables Clamps/ electrodes	m no	M19
Earthing, Conductors, Transformers	no	26.4.6.3	Lightning conductors – terminations etc	no	M20
Fittings: Light fittings (with or without lamps) Plugs, socket, switches Appliances	no	28.4.5	Switches, outlets	no	M21, P11
Wiring –in of appliances	no	28.4.5.5	Light fittings & lamps, incl. wall boxes Plus bells clocks, alarms, appliances	no	P12 P13
Identification	no	28.4.6.2	Identification Route markers	Item no	M22
Special Systems Clocks, bells, communications	Detail -ed	28.4.6.1	Tools & spares Work to existing	no Item	M23

Television Communications			Pits	no	M24 M25, D6
Approvals, Testing Shop Drawings	item item item	28.4.7	Work associated with other trades	no	M26, M27
			NOTE excavation in rock kept separate		M28

35. MECHANICAL INSTALLATIONS

35. Mechanical Installations Page 159	<p>Identify basis of mechanical installations measured where no installation drawings provided.</p> <p>Measure ductwork & associated fittings by area m² per ductwork measurement rules in previous NZS 4202. Refer on http://www.nziqs.co.nz</p> <p>Internal or external insulation is included with the ductwork where applicable.</p> <p>Include seismic joints.</p> <p>Specially designed brackets and hangers – measured in No</p> <p>Any associated pipework measured as Section 32 Hydraulics.</p>
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NZS4202			ANZSMM 2018		
Mechanical Services - Section 25	Unit	Clauses NZS4202	Mechanical Installations – Section 35	Unit	Clauses ANZSMM
Range of rates to include items a -g		25.2	Identify basis of mechanical installations measured where no installation drawings provided.		
Plant & Equipment	no	25.4.1	Items for: Balancing/testing/installed Drawings/ maintenance	item	
Pipework 25 dia. and larger fittings measured	m	25.4.2	Separation of installation, materials, whether primed, surface treated or painted and fixing methodology		M1 –M6 P1, D1

Guides, hangers, etc. measured	no		Pipework and fittings 32 dia and larger – as Section 32 Hydraulic	m/no	M7
Line mounted valves gauges etc measured	no		Ductwork Includes linings and insulation Note: formula for area used in NZ Special connections/joints Fittings note full range (include area for NZ) Designed brackets/hangers Dampers /vanes/access doors etc Draught shutters Grilles/deflectors/etc Cowls/terminals/ventilators/hoods/et	m m ² no no no no no	M8 & M9 M10, D2 M11 M12
Ductwork – rectangular main members – NZIQS formula	m ²	25.4.3	Plant & equipment & ancillaries Boilers/compressors/fans/radiators/heaters /panels etc	no	
Ductwork – rectangular fittings – NZIQS formula	m ²		Loose keys/tools/spare parts/etc	item	
Ductwork – circular main members	m		Work to existing Services & equipment	item	M14
Ductwork – circular fittings	no		Performance/design data/control systems	item	M15 – M19
Dampers, vanes, grilles, flexible connections, etc	no		Control Systems	item	M20 – M22

Insulation		25.4.4	identification	item	M23, D3
Controls Panels, circuits, connections, sensors, equipment	no	25.4.5	Work by other sections	item	M24 & M25
Electrical Boards, circuits, connections	no	25.4.6	Excavation in rock		M26
Painting Equipment, pipework, brackets	m ² /m	25.4.7			
Sundries Support systems Sleeves/drilling Penetration seals Flashings Identification tags	no no no no no	25.4.8			
General Consents Drawings/manuals Tests Spares Maintenance	no no no no no	25.4.9			

36. TRANSPORTATION SERVICES

36. Transportation Services Page 167	Speed of travelators and lifts to be stated. Temporary protection panels measured.
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NZS4202			ANZSMM 2018		
Lifts & Escalators - Section 27	Unit	Clauses NZS4202	Transportation Services – Section 36	Unit	Clauses ANZSMM
Builders work incl. scaffolding	no	27.3	Identify basis of installations measured where no installation drawings provided. Item for shop and installed drawings, specific service & maintenance requirements and conforming to statutory requirements. Escalators - balustrade and soffit treatment Travelators – balustrade treatment Lifts – car size, height travelled, number of doors, speed, temporary protection pads Non- structural surrounds Lift eyes, beams	item	
LIFTS All-inclusive plant description	no	27.4.1			
Ropes/counterweights	no	TO			
Electrical work	no				
Motors	no	27.4.4			
Operating indicators & panels	no				
Doors	no				
Reveal linings	no				
Unistruts	no				
Guide rails	no				
Buffers	no				
ESCALATORS Plant description	no	27.4.2			
Sundries/General					

Building in	no	27.4.3 & 4			
Consents	no				
Tests	no				
Maintenance	no				
Drawings/manuals	no				

37. EXTERIOR ELEMENTS

37. Exterior Elements Page 168	Follow standard trade measurement principles of the trades covered in this section.
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NZS4202			ANZSMM 2018		
Siteworks - Section 37	Unit	Clauses NZS4202	Exterior Elements – Section 37	Unit	Clauses ANZSMM
Landscaping Excavation/topsoil Treatment Plants Maintenance Fencing/screens and associated work	m ² /m ³ m ² no item m/no	37.1	Landscaping Top soil – measure as Section 4.2 Filling & Hardcore Cultivation Treatment – seeding, turfing, mulching Surfaces > 30 degrees separate Trees, shrubs Maintenance of landscaping	m ² no item	M1 D1 M2
Filling /hardcore (sect 4.2 Filling) Road sealing – asphalt or bitumen Concrete paving/road Note can include sub-base Kerbing, gutters, road markings	m ² /m ³ m ² m ² m	37.2	Irrigation installation		M3

Symbols/lettering	no				
Road sealing – plant mix or chip seal	m ²	37.3	Timber fencing	m	
Road markings	m		Doors, gates, special; framing posts	no	
Arrows/road crossings	no				
Landscaping		37.3.5	Mesh screens, metal fences,	m ²	
Excavation/topsoil	m ³		Doors, gates, special framing, posts	no	
Plants	no				
Landscaping, ground cover	m ²		Wire mesh screens, metal fences	m	
Rock pools/gardens	m ²				
Cribwalls	m ²		Doors, gates, posts	no	
Spraying	m ²	37.3.6			
			Roadworks		
			Item for masking and protection from bitumen	item	
			Filling, hardcore measured in accordance with section 2 Filling and hardcore – Note option of measuring filling & base course less than 250 mm with m ² item for slab not exceeding 150 thick		M1, M2 & M3
			Road surfacing	m ²	M4, M5 & M6

			External concrete paving, concrete roads measured in accordance with section 6 concrete keeping base material separate – Note option of measuring filling & base course each not exceeding 250 mm with m ² item for slab less than 150 thick		M7 M8
			Concrete kerbs, gutters all inclusive	m	M9
			Line marking Road symbols, lettering	m no	M10, P2 M11, P3 M12

38. FIRE PROTECTION

38. Fire Protection Page 172	Identify basis of Fire Protection installation measured where no installation drawings provided. Follows basic pipe, plant and outlet measurement principles with larger than 32 dia. fittings measured.
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NZS4202			ANZSMM 2018		
Fire Protection - Section 26	Unit	Clauses NZS4202	Fire Protection – Section 38	Unit	Clauses ANZSMM
Separation of the following classifications: (a) Electrical & pneumatic systems (b) Sprinklers (c) First aid fire protection			NEW SECTION ADDED WHICH FOLLOWS RULES OF HYDRAULIC MEASUREMENT SECTION Refer to NZS4202 for full extent of items to measure in each system. Remember 32 dia. pipe fittings & larger only measured		
Electrical & pneumatic systems Plant units Wiring, tubing & fittings Outlets Trunking	no no/m no m		Identify basis of Fire Protection installation measured where no installation drawings provided. Items for obtaining all necessary approvals, testing & commissioning, shop drawings, operating and maintenance manuals, as built drawings.	items	

Sprinklers Pipe work & fittings Heads	m/no no		Electrical & pneumatic systems Plant units Wiring, tubing & fittings Outlets Trunking	no no/m no m	
First aid Fire Protection Hand Extinguishers Hose reel systems & fittings Hose reels	no m/no no		Sprinklers Pipe work & fittings Heads	m/no no	
Sundries Sleeves/drilling Penetration seals	no no		First aid Fire Protection Hand Extinguishers Hose reel systems & fittings Hose reels	no m/no no	
General Consents Tests Drawings/manuals	no no no		Sundries Sleeves/drilling Penetration seals	no no	

39. INCLUDED SUMS

39. Included Sums Page 173	<p>Summary of all sums in the project.</p> <p>The Trade location in the schedule of quantities of the priced PC Sums to be identified.</p> <p>Additional Items where relevant will be included for any oncost.</p>
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NZS4202			ANZSMM 2018		
Included Sums- Section 38	Unit	Clauses NZS4202	Included Sums – Section 39	Unit	Clauses ANZSMM
Memorandum list of all included sums in various sections - Contingency, provisional, net or prime costs (pc) sums described and scheduled	item	38.3.1	<p>This section lists all included sums (Provisional and Contingency) contained in the various sections of the specification, except Prime Cost (PC) sums that will be found in their respective trade sections.</p> <p>Details shall be given of the value of each PC sum and the section in which it has been included</p> <p>Additional items where relevant will be given for margin, taking delivery, storage, insurance, attendance and fixing.</p>		

Where required Items for margin, taking delivery, storage, attendance. fixing and the like	item	38.3.2	Contingency Sum	item	
			Probvisional sums	items	
			<p>Net or prime cost sums</p> <p>Note: Identification only of value of Net or prime cost sums inclusive of additional items where relevant for margin, taking delivery, storage, insurance, attendance and fixing. To include the section in which the sum has been included.</p>		