Mathcad Calculations
Order Form

bigpigltd3@gmail.com

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			PDF	Mathcad	Order
1 Actions	*Full Set (including discount)*		*$40*	*$396*	
1A Analysis					
Updated	Beam Analysis	Rev 1	$2	$20	
	Beam Deflections allowing for Flexure & Shear	Rev 0	$2	$20	
	SIPS Panel Beam Design using a Compound Section	Rev 0	$2	$20	
	Frame Analysis using Kleinlogal	Rev 0	$2	$20	
	Pitched Portal Frame Analysis using Kleinlogal	Rev 0	$2	$20	
	Section Properties - Angle	Rev 0	$2	$20	
	Section Properties - Channel	Rev 0	$2	$20	
	Section Properties - RHS	Rev 0	$2	$20	
	Floor Vibration by Mast Method	Rev 0	$2	$20	
New	SIPS PIR Panel - Section Properties (Bottom skin steel, Top Skin Aluminium)	Rev 1	$2	$20	
New	Compound Section Properties (RHS Aluminium Outer + 2No. Steel Plate Inside)	Rev 1	$2	$20	

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New	Compound Section Properties (RHS Aluminium Outer + RHS Steel Inner)	Rev 1	$2	$20	
New	Nested Channel Member Design using a Compound Section	Rev 1	$2	$20	
	1B Wind Actions				
Updated	Wind Loading to NZS1170.2: 2021	Rev 1	$2	$20	
	Wind on a Hoarding	Rev 0	$2	$20	
New	Freestanding Roofs subject to Wind Loads	Rev 1	$2	$20	
New	Circulars Bins, Silos & Tanks subject to Wind Loads	Rev 1	$2	$20	
New	Roof Mounted Solar Panels subject to Wind Loads	Rev 1	$2	$20	
	1C Snow Actions				
	Snow Loading	Rev 0	$2	$20	
	1D Seismic Actions				
	Derivation of Horizontal Seismic Design Action Coefficient	Rev 0	$2	$20	
	Seismic Demand on Steel Beam (by Parts)	Rev 0	$2	$20	
	Seismic Restraints for Equipment	Rev 0	$2	$20	
			~~$44~~	~~$440~~	
2 Concrete		*Full Set*	*$23*	*$234*	
	2A RC-New Design				
New	Anchor Design	Rev 1	$2	$20	
New	Anchor Design - Corner Columns	Rev 1	$2	$20	
	RC-Beam Check	Rev 0	$2	$20	
	RC Circular Squat Column Design	Rev 0	$2	$20	
	RC-Slab Check	Rev 0	$2	$20	
New	RC-Stair Design	Rev 1	$2	$20	
New	Calculation of Shrinkage Strain in Concrete	Rev 1	$2	$20	
	2B RC-Seismic Assessment				
	RC Beam Check	Rev 0	$2	$20	
	RC Column Check	Rev 0	$2	$20	
	2C PCC New Design				
	Floor Vibration by Mast Method	Rev 0	$2	$20	
New	Tiltwall Single Storey Shear Wall	Rev 1	$2	$20	
New	Tiltwall Single Storey Propped Cantilever	Rev 1	$4	$40	
			~~$26~~	~~$260~~	
3 Steel		*Full Set*	*$67*	*$666*	
	3A Steel New Design				
Updated	Bolt Group subject to In-plane Bending, Axial & Shear Forces	Rev 1	$2	$20	
New	Bolt Group subject to Out of plane Bending, Axial & Shear Forces	Rev 1	$2	$20	
New	Portal Knee Bolted Connection	Rev 1	$2	$20	
New	Fire Rating to NZS 3404	Rev 1	$2	$20	
New	Steel Column Design subject to Biaxial Bending, Shear, and Axial Load	Rev 1	$2	$20	
	Steel Connection Design-Apex	Rev 1	$2	$20	

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	Steel Connection Design-BCS1	Rev 1	$2	$20	
	Steel Connection Design-Bolt Group	Rev 1	$2	$20	
	Steel Connection Design-Fin Plate	Rev 1	$2	$20	
	Steel Connection Design-WeldedKnee	Rev 1	$2	$20	
	Steel Connection Design-Splice	Rev 1	$2	$20	
	Steel Handrail Design	Rev 0	$2	$20	
	Steel Portal Frame BUs	Rev 0	$2	$20	
Updated	Steel Portal Frame Design Check	Rev 1	$4	$40	
New	Steel Rafter Restraint Design	Rev 1	$2	$20	
New	Weld Design subject to Shear	Rev 1	$2	$20	
New	Weld Design Reid Bar Connection	Rev 1	$2	$20	
3B	**Steel Seismic Assessment**				
	Steel Beam Design subject to Biaxial Bending, Shear & Axial Load	Rev 1	$2	$20	
3C	**Light Gauge Steel**				
Updated	Light Steel Fixing	Rev 1	$2	$20	
New	Light Steel Rivets - Matrix	Rev 1	$2	$20	
New	Light Steel Screws - Matrix	Rev 1	$2	$20	
	Light Steel Members - Angles	Rev 0	$2	$20	
	Light Steel Members - Channels	Rev 0	$2	$20	
	Connection Design - Beam-Column	Rev 0	$2	$20	
	Connection Design - Portal-Base	Rev 0	$2	$20	
	Connection Design - Portal-Knee	Rev 0	$2	$20	
3D	**Structural Insulated Panels (SIPS)**				
Updated	SIPS Panel Beam Design using a Compound Section (Simplified Version)	Rev 1	$2	$20	
New	Wall to Ceiling Panel Connection using Aluminium Angles & Rivets	Rev 1	$2	$20	
	SIPS-Panel-Beam-with-Aluminium Angles	Rev 0	$2	$20	
	SIPS-Panel-Beam-with Steel Angles	Rev 0	$2	$20	
Updated	SIPS-Panel-Beam-with Steel Channels	Rev 1	$2	$20	
	SIPS-Roof-Design	Rev 0	$2	$20	
	SIPS-Slender Wall Design	Rev 0	$2	$20	
	SIPS-Wall-Splice-Design	Rev 0	$2	$20	
	Thermopanel-Load-Spans	Rev 0	$2	$20	
	Thermopanel-Spans	Rev 0	$2	$20	
			~~$74~~	~~$740~~	
4 Composite					
5 Timber		*Full Set*	*$23*	*$234*	
5A	**Timber New Design**				
	Glass Barrier Design- Timber Fixing	Rev 0	$2	$20	
	Timber Barrier Design	Rev 0	$2	$20	

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			PDF	Mathcad	Order
	Timber Beam Design (single span)	Rev 0	$2	$20	
New	Timber Beam Design (multi-span)	Rev 1	$4	$40	
New	Timber Beam Design Example	Rev 1	$2	$20	
	Timber Bolted Joint	Rev 0	$2	$20	
	Timber Screwed Joint	Rev 0	$2	$20	
New	Timber Screwed Joint - Matrix	Rev 1	$2	$20	
New	Timber Column Design Examples	Rev 1	$2	$20	
New	Timber Steel Flitch Beam Design	Rev 1	$2	$20	
5B	**Timber Seismic Assessment**				
	Timber Beam Assessment	Rev 1	$2	$20	
	Probable Shear Strength of an Existing Timber Floor Diaphragm	Rev 0	$2	$20	
			~~$26~~	~~$260~~	
6	**Masonry**	*Full Set*	*$22*	*$216*	
6A	**Reinforced Masonry Design Examples (NZCMA)**				
3.2a	Reinforced Masonry Beam Flexure (NZCMA)	Rev 0	$2	$20	
3.2b	Reinforced Masonry Wall Flexure In Plane (NZCMA)	Rev 0	$2	$20	
3.3	Reinforced Masonry Wall Flexure Out of Plane (NZCMA)	Rev 0	$2	$20	
3.4	Reinforced Masonry Wall Shear In Plane (NZCMA)	Rev 0	$2	$20	
3.6	Ductile Cantilever Reinforced Masonry Wall (NZCMA)	Rev 0	$2	$20	
6B	**Reinforced Masonry (Seismic Assessment)**				
	Reinforced Masonry Wall - In-plane Shear Check	Rev 0	$2	$20	
6C	**Unreinforced Masonry (Seismic Assessment)**				
	URM Parapet Out of Plane Check	Rev 0	$2	$20	
	Pilaster Out of Plane Restraint	Rev 0	$2	$20	
	URM Wall Out of Plane Check	Rev 0	$2	$20	
	Infill Wall 2 Way Out of Plane Check	Rev 0	$2	$20	
	Infill Wall 2 Way In Plane Check	Rev 0	$2	$20	
6D	**Reinforced Masonry (New Design)**	Rev 0			
	Reinforced Masonry Chimney	Rev 0	$2	$20	
			~~$24~~	~~$240~~	
7	**Foundations & Geotechnics**	*Full Set*	*$45*	*$450*	
7A	**Pad Footings**				
Updated	Concentric Pad Footing Design - Cohesionless Soils	Rev 1	$2	$20	
Updated	Concentric Pad Footing Design - Cohesive Soils	Rev 1	$2	$20	
Updated	Pad Footing-Eccentric	Rev 1	$2	$20	
7B	**Pile Design**				
	Pile-Design-Driven-Hiley	Rev 0	$2	$20	
Updated	A-Pile-Design-Free-Undrained	Rev 2	$2	$20	
Updated	B-Pile-Design-Fixed-Undrained	Rev 2	$2	$20	
Updated	C-Pile-Design-Free-Drained	Rev 2	$2	$20	
Updated	D-Pile-Design-Fixed-Drained	Rev 2	$2	$20	
New	E-Pile-Design-Free-Undrained-NC	Rev 1	$2	$20	
New	F-Pile-Design-Fixed-Undrained-NC	Rev 1	$2	$20	

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	Screw Pile Structural Capacity	Rev 1	$2	$20	
Updated	Square Timber Anchor Pile	Rev 1	$2	$20	
Updated	Square Timber Cantilever Pile	Rev 1	$2	$20	
New	Timber Pile - Section Capacity	Rev 1	$2	$20	
New	Concrete Pile - Section Capacity (6 bar)	Rev 1	$2	$20	
New	Concrete Pile - Section Capacity (8 bar)	Rev 1	$2	$20	
7C	**Retaining Walls**				
Updated	Eg1 Design of a Cantilever Pole Retaining Wall to Resist Earthquake Loading	Rev 1	$2	$20	
Updated	Eg2 Concrete Cantilever Retaining Wall	Rev 1	$2	$20	
Updated	Eg3 Design of a Concrete Crib Retaining Wall to Resist Earthquake Loading	Rev 1	$2	$20	
New	Eg 4 Tied-Back Retaining Wall	Rev 1	$2	$20	
Updated	Earth Pressures by Coulomb Theory	Rev 1	$2	$20	
Updated	RetainingWall-BoundaryWallCombined	Rev 1	$2	$20	
	Example from Appendix C of Verification Method B1/VM4 Foundations (not included in B1/VM2)	Rev 0	$2	$20	
Updated	Timber Barrier Pile Wall Design Option 1	Rev 1	$2	$20	
Updated	Timber Barrier Pile Wall Design Option 2	Rev 1	$2	$20	
			~~$50~~	~~$500~~	
8 Seismic		*Full Set*			
9 Aluminium		*Full Set*	*$9*	*$90*	
	Aluminium Angles	Rev 0	$2	$20	
	Aluminium Connections	Rev 0	$2	$20	
	Aluminium RHS Element Design	Rev 0	$2	$20	
	Aluminium CHS Tubular Element Design	Rev 0	$2	$20	
	Aluminium RHS Purlin & Girt Design	Rev 0	$2	$20	
			~~$10~~	~~$100~~	
			PDF	Mathcad	Total
	All sets including discount		***$190***	***$1,900***	
	TOTAL ORDER				
			~~$229~~	~~$2,286~~	