

PMC Manufactured Mineral Products

TRAINING PACKAGE

Version 1.00

WA NOMINAL HOURS GUIDE

Introduction

This Guide has been generated to enable the stakeholders in this Industry in Western Australia to participate in the managed implementation of the National PMC Manufactured Mineral Products Training Package.

This Guide is designed to aid Registered Training Organisations (RTOs) to convert from existing Training Package qualifications to new Training Package qualifications within the scope of their training delivery.

The Guide should be read in conjunction with the endorsed components of the Training Package.

Version 1.00 of the PMC Manufactured Mineral Products was released by Training.Gov.Au (TGA) on the 22/06/2016.

Transition Arrangements

Registered Training Organisations (RTOs) are required to deliver Training Package qualifications in accordance with the Standards for RTOs. For further information visit the Training Accreditation Council website www.tac.wa.gov.au.

Nominal Hours

Nominal hours are the hours of training notionally required to achieve the outcomes of units of competency.

Nominal hours are identified for nationally endorsed qualifications. Nominal hours may vary for a qualification depending on the selection of units of competency.

In Western Australia, nominal hours are used as a mechanism for funding allocation.

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Qualifications and Nominal Hours

The following table provides a summary of the qualifications and nominal hours in the industry.

National Code	National Title	Nominal Hours
PMC20116	Certificate II in Manufactured Mineral Products	480
PMC30116	Certificate III in Manufactured Mineral Products	741
PMC40116	Certificate IV in Manufactured Mineral Products	872
PMC50116	Diploma of Manufactured Mineral Products	467
PMC60116	Advanced Diploma of Manufactured Mineral Products	787
PMC80116	Graduate Certificate In Refractories Engineering	421

Units of Competency and Nominal Hours

The following table provides a summary of the units of competency and nominal hours in the industry.

National Code	National Title	Nominal Hours
PMC552002	Operate equipment to blend/mix materials	30
PMC552003	Operate grinding equipment	40
PMC552004	Prepare for production	20
PMC552005	Process greenware/green products	20
PMC552006	Operate an autoclave	20
PMC552007	Heat accelerate the curing of precast concrete	60
PMC552008	Operate crushing equipment	40
PMC552010	Operate a calcining kiln	40
PMC552020	Operate slip casting equipment	30
PMC552021	Operate manual glazing equipment	30
PMC552022	Prepare materials for clay and ceramic production	30
PMC552023	Finish products after firing	20
PMC552024	Hand mould products	30
PMC552030	Operate a firing kiln	30
PMC552031	Operate extrusion equipment	30
PMC552032	Operate pressing equipment	30
PMC552040	Operate glass melting process	50
PMC552041	Operate process ovens	40
PMC552042	Operate blown insulation equipment	50
PMC552043	Operate float forming equipment	50
PMC552044	Operate fibre forming equipment	50
PMC552045	Operate container forming equipment	40
PMC552046	Operate glass printing equipment	40

PMC552047	Operate primary annealing equipment	50
PMC552048	Operate glass finishing equipment	40
PMC552049	Operate on-line stacking and assembly equipment	40
PMC552050	Schedule, cut and bend reinforcement	40
PMC552051	Finish green concrete products	40
PMC552052	Cast moulded concrete products	40
PMC552053	Finish cured concrete products	40
PMC552054	Spin concrete pipes	40
PMC552055	Conduct benching operations	40
PMC552056	Assemble, fabricate and place reinforcement	30
PMC552057	Finish casting operation	20
PMC552058	Demould concrete products	20
PMC552060	Batch mix concrete	30
PMC552061	Deliver concrete to site	30
PMC552065	Prepare asphalt	40
PMC552070	Operate forming equipment	40
PMC552072	Produce fibrous plasterboard	30
PMC552090	Use and maintain tools and equipment for refractory operations	30
PMC552091	Prepare for, install and repair refractory brickwork/blockwork	40
PMC552092	Prepare for and install mouldable refractory materials	40
PMC552093	Prepare for and cast refractory materials	40
PMC552094	Prepare for and apply shotcrete for installation	40
PMC552095	Prepare for, install and repair ceramic fibre	40
PMC553000	Set up and tune a process	40
PMC553010	Process raw meal into product	50
PMC553020	Prepare moulds and dies	40
PMC553021	Set up and tune glazing equipment	50
PMC553040	Set up and optimise glass forming process	80

PMC553041	Set up and optimise glass furnace process	80
PMC553042	Set up and optimise secondary process	40
PMC553050	Produce architectural precast concrete	50
PMC553051	Produce structural precast concrete	60
PMC553070	Design and construct moulds for fibrous plaster products	40
PMC553072	Model fibrous plaster products	60
PMC553080	Set up and optimise finishing process	30
PMC554020	Design and prepare models, moulds and dies	40
PMC554090	Undertake simple refractory design	40
PMC554091	Analyse refractory failures	30
PMC555030	Analyse equipment performance	50
PMC555031	Choose materials for an application	50
PMC556031	Design structural/mechanical components	50
PMC557001	Manage trials	35
PMC557090	Select refractory materials for an application	45
PMC557091	Design a refractory lining	45
PMC557092	Specify and interpret refractory tests	35
PMC557093	Design a refractory/ceramic component	35
PMC557094	Investigate refractory failures	35
PMC557095	Specify and monitor the installation of monolithic/castable refractories	35
PMC557096	Specify and monitor the installation of block/precast refractories	35
PMC557097	Specify and monitor repairs to refractory installations	35
PMC557098	Specify refractory installation systems	35
PMC561072	Store materials for production	15
PMC561080	Organise self	15
PMC562070	Move materials	40
PMC562071	Operate bulk materials handling equipment	40
PMC562081	Deliver customer service	20

PMC562083	Allocate and complete team tasks	20
PMC563081	Carry out stock control	20

Mapping Qualifications

The following table provides an overview of the qualifications from Version 1.00 which replace qualifications from the existing version of the PMC10 Manufactured Mineral Products.

PMC10 Current Qualification				PMC Replacement Qualification		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
PMC20110	Certificate II in Manufactured Mineral Products	480	E	PMC20116	Certificate II in Manufactured Mineral Products	480
PMC30110	Certificate III in Manufactured Mineral Products	741	E	PMC30116	Certificate III in Manufactured Mineral Products	741
PMC40110	Certificate IV in Manufactured Mineral Products	872	E	PMC40116	Certificate IV in Manufactured Mineral Products	872
PMC50110	Diploma of Manufactured Mineral Products	467	E	PMC50116	Diploma of Manufactured Mineral Products	467
PMC60110	Advanced Diploma of Manufactured Mineral Products	787	E	PMC60116	Advanced Diploma of Manufactured Mineral Products	787
PMC70110	Graduate Certificate In Refractories Engineering	421	E	PMC80116	Graduate Certificate In Refractories Engineering	421

Mapping Units of Competency

The following table provides an overview of the units of competency from Version 1.00 which replace units of competency from the existing version of the PMC Manufactured Mineral Products.

PMC10 Current Unit				PMC Replacement Unit		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
PMC552002C	Operate equipment to blend/mix materials	30	E	PMC552002	Operate equipment to blend/mix materials	30
PMC552003C	Operate grinding equipment	40	E	PMC552003	Operate grinding equipment	40
PMC552004C	Prepare for production	20	E	PMC552004	Prepare for production	20
PMC552005C	Process greenware/green products	20	E	PMC552005	Process greenware/green products	20
PMC552006C	Operate an autoclave	20	E	PMC552006	Operate an autoclave	20
PMC552007B	Heat accelerate the curing of precast concrete	60	E	PMC552007	Heat accelerate the curing of precast concrete	60
PMC552008B	Operate crushing equipment	40	E	PMC552008	Operate crushing equipment	40
PMC552010C	Operate a calcining kiln	40	E	PMC552010	Operate a calcining kiln	40
PMC552020C	Operate slip casting equipment	30	E	PMC552020	Operate slip casting equipment	30
PMC552021C	Operate manual glazing equipment	30	E	PMC552021	Operate manual glazing equipment	30
PMC552022C	Prepare materials for clay and ceramic production	30	E	PMC552022	Prepare materials for clay and ceramic production	30
PMC552023C	Finish products after firing	20	E	PMC552023	Finish products after firing	20
PMC552024C	Hand mould products	30	E	PMC552024	Hand mould products	30
PMC552030C	Operate a firing kiln	30	E	PMC552030	Operate a firing kiln	30
PMC552031C	Operate extrusion equipment	30	E	PMC552031	Operate extrusion equipment	30
PMC552032C	Operate pressing equipment	30	E	PMC552032	Operate pressing equipment	30
PMC552040C	Operate glass melting process	50	E	PMC552040	Operate glass melting process	50
PMC552041C	Operate process ovens	40	E	PMC552041	Operate process ovens	40
PMC552042C	Operate blown insulation equipment	50	E	PMC552042	Operate blown insulation equipment	50
PMC552043C	Operate float forming equipment	50	E	PMC552043	Operate float forming equipment	50
PMC552044C	Operate fibre forming equipment	50	E	PMC552044	Operate fibre forming equipment	50
PMC552045C	Operate container forming equipment	40	E	PMC552045	Operate container forming equipment	40

PMC552046C	Operate glass printing equipment	40	E	PMC552046	Operate glass printing equipment	40
PMC552047C	Operate primary annealing equipment	50	E	PMC552047	Operate primary annealing equipment	50
PMC552048C	Operate glass finishing equipment	40	E	PMC552048	Operate glass finishing equipment	40
PMC552049C	Operate on-line stacking and assembly equipment	40	E	PMC552049	Operate on-line stacking and assembly equipment	40
PMC552050C	Schedule, cut and bend reinforcement	40	E	PMC552050	Schedule, cut and bend reinforcement	40
PMC552051C	Finish green concrete products	40	E	PMC552051	Finish green concrete products	40
PMC552052C	Cast moulded concrete products	40	E	PMC552052	Cast moulded concrete products	40
PMC552053C	Finish cured concrete products	40	E	PMC552053	Finish cured concrete products	40
PMC552054C	Spin concrete pipes	40	E	PMC552054	Spin concrete pipes	40
PMC552055C	Conduct benching operations	40	E	PMC552055	Conduct benching operations	40
PMC552056B	Assemble, fabricate and place reinforcement	30	E	PMC552056	Assemble, fabricate and place reinforcement	30
PMC552057B	Finish casting operation	20	E	PMC552057	Finish casting operation	20
PMC552058B	Demould concrete products	20	E	PMC552058	Demould concrete products	20
PMC552060C	Batch mix concrete	30	E	PMC552060	Batch mix concrete	30
PMC552061C	Deliver concrete to site	30	E	PMC552061	Deliver concrete to site	30
PMC552065B	Prepare asphalt	40	E	PMC552065	Prepare asphalt	40
PMC552070B	Operate forming equipment	40	E	PMC552070	Operate forming equipment	40
PMC552072B	Produce fibrous plasterboard	30	E	PMC552072	Produce fibrous plasterboard	30
PMC552090B	Use and maintain tools and equipment for refractory operations	30	E	PMC552090	Use and maintain tools and equipment for refractory operations	30
PMC552091B	Prepare for, install and repair refractory brickwork/blockwork	40	E	PMC552091	Prepare for, install and repair refractory brickwork/blockwork	40
PMC552092B	Prepare for and install mouldable refractory materials	40	E	PMC552092	Prepare for and install mouldable refractory materials	40
PMC552093B	Prepare for and cast refractory materials	40	E	PMC552093	Prepare for and cast refractory materials	40
PMC552094B	Prepare for and apply shotcrete for installation	40	E	PMC552094	Prepare for and apply shotcrete for installation	40
PMC552095B	Prepare for, install and repair ceramic fibre	40	E	PMC552095	Prepare for, install and repair ceramic fibre	40
PMC553000C	Set up and tune a process	40	E	PMC553000	Set up and tune a process	40
PMC553010C	Process raw meal into product	50	E	PMC553010	Process raw meal into product	50
PMC553020C	Prepare moulds and dies	40	E	PMC553020	Prepare moulds and dies	40

PMC553021C	Set up and tune glazing equipment	50	E	PMC553021	Set up and tune glazing equipment	50
PMC553040C	Set up and optimise glass forming process	80	E	PMC553040	Set up and optimise glass forming process	80
PMC553041C	Set up and optimise glass furnace process	80	E	PMC553041	Set up and optimise glass furnace process	80
PMC553042C	Set up and optimise secondary process	40	E	PMC553042	Set up and optimise secondary process	40
PMC553050C	Produce architectural precast concrete	50	E	PMC553050	Produce architectural precast concrete	50
PMC553051B	Produce structural precast concrete	60	E	PMC553051	Produce structural precast concrete	60
PMC553070B	Design and construct moulds for fibrous plaster products	40	E	PMC553070	Design and construct moulds for fibrous plaster products	40
PMC553072B	Model fibrous plaster products	60	E	PMC553072	Model fibrous plaster products	60
PMC553080B	Set up and optimise finishing process	30	E	PMC553080	Set up and optimise finishing process	30
PMC554020D	Design and prepare models, moulds and dies	40	E	PMC554020	Design and prepare models, moulds and dies	40
PMC554090B	Undertake simple refractory design	40	E	PMC554090	Undertake simple refractory design	40
PMC554091B	Analyse refractory failures	30	E	PMC554091	Analyse refractory failures	30
PMC555030C	Analyse equipment performance	50	E	PMC555030	Analyse equipment performance	50
PMC555031B	Choose materials for an application	50	E	PMC555031	Choose materials for an application	50
PMC556031C	Design structural/mechanical components	50	E	PMC556031	Design structural/mechanical components	50
PMC557001A	Manage trials	35	E	PMC557001	Manage trials	35
PMC557090A	Select refractory materials for an application	45	E	PMC557090	Select refractory materials for an application	45
PMC557091A	Design a refractory lining	45	E	PMC557091	Design a refractory lining	45
PMC557092A	Specify and interpret refractory tests	35	E	PMC557092	Specify and interpret refractory tests	35
PMC557093A	Design a refractory/ceramic component	35	E	PMC557093	Design a refractory/ceramic component	35
PMC557094A	Investigate refractory failures	35	E	PMC557094	Investigate refractory failures	35
PMC557095A	Specify and monitor the installation of monolithic/castable refractories	35	E	PMC557095	Specify and monitor the installation of monolithic/castable refractories	35
PMC557096A	Specify and monitor the installation of block/precast refractories	35	E	PMC557096	Specify and monitor the installation of block/precast refractories	35
PMC557097A	Specify and monitor repairs to refractory installations	35	E	PMC557097	Specify and monitor repairs to refractory installations	35
PMC557098A	Specify refractory installation systems	35	E	PMC557098	Specify refractory installation systems	35
PMC561072C	Store materials for production	15	E	PMC561072	Store materials for production	15

PMC561080B	Organise self	15	E	PMC561080	Organise self	15
PMC562070B	Move materials	40	E	PMC562070	Move materials	40
PMC562071C	Operate bulk materials handling equipment	40	E	PMC562071	Operate bulk materials handling equipment	40
PMC562081B	Deliver customer service	20	E	PMC562081	Deliver customer service	20
PMC562083C	Allocate and complete team tasks	20	E	PMC562083	Allocate and complete team tasks	20
PMC563081C	Carry out stock control	20	E	PMC563081	Carry out stock control	20

Traineeships

The following table provides a summary of the qualifications in the PMC Manufactured Mineral Products and the accredited traineeship courses they will replace.

PMC10 Current Qualification				PMC Replacement Qualification			
National Code	National Title	Traineeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
PMC20110	Certificate II in Manufactured Mineral Products	TR02490: PROCESS MANUFACTURED MINERAL PRODUCTS (LEVEL 2)	480	E	PMC20116	Certificate II in Manufactured Mineral Products	480
PMC30110	Certificate III in Manufactured Mineral Products	TR08280: PROCESS MANUFACTURED MINERAL PRODUCTS (LEVEL 3)	741	E	PMC30116	Certificate III in Manufactured Mineral Products	741
PMC40110	Certificate IV in Manufactured Mineral Products	TR08290: PROCESS MANUFACTURED MINERAL PRODUCTS (LEVEL 4)	872	E	PMC40116	Certificate IV in Manufactured Mineral Products	872