

PMC10 MANUFACTURED MINERAL PRODUCTS TRAINING PACKAGE

VERSION 1

WA NOMINAL HOURS GUIDE

**Western Australian Department of Training and
Workforce Development**

June 2010

CONTENTS

Introduction	2
Obtaining the Training Package.....	3
Transition Arrangements.....	4
Nominal Hours	4
Qualifications and Nominal Hours.....	5
Units of Competency and Nominal Hours	6
Mapping Qualifications.....	8
Mapping Units of Competency	9
Traineeships	12

Introduction

This Guide has been generated to enable the stakeholders in the Manufactured Mineral Products Industry in Western Australia to participate in the managed implementation of the National PMC10 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 of the PMC10 Manufactured Mineral Products Training Package was released by Training.Gov.Au (TGA) on the **30 April 2010**.

Obtaining the Training Package

The PMC10 Manufactured Mineral Products Training Package can be purchased from:



Office: Level 8, 80 Arthur Street
North Sydney NSW 2060
Postal: PO Box 289
North Sydney NSW 2059
T: 1800 358 458 | F: (02) 9955 8044
E: info@mskills.com.au
W: www.mskills.com.au

Information on National Training Packages is also available through Training.Gov (TGA), which can be located on the Internet at: www.training.gov.au

All RTOs who have Training Package qualifications on their Scope of Delivery must have access to the relevant Training Package.

Transition Arrangements

Registered Training Organisations (RTOs) are required to deliver Training Package qualifications within 12 months of the release date of the Training Package on to Training.gov.au (TGA).

Students currently enrolled in an existing version of the Training Package qualification should be permitted to complete the program they enrolled in initially, unless the move to the related qualification from a Training Package can be made without disadvantage to a student.

Nominal Hours

The Commonwealth Department of Employment, Education and Workplace Relations' definition of nominal hours states:

“The value assigned to a structured program of study that nominally represents the anticipated hours of supervised learning and/or training deemed necessary to conduct training/learning and assessment activities associated with the program of study”

Source: National Quality Council Training Package Glossary Version V2.1
17/03/2010

<http://www.deewr.gov.au/Skills/Overview/Policy/TPDH/Downloads/Documents/TrainingPackGlossary.pdf>

Nominal hours are identified for each Training Package qualification. Total nominal hours may vary within a qualification depending on the units of competency

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

Qualifications and Nominal Hours

The following table provides a summary of the qualifications and nominal hours in the PMC10 Training Package Manufactured Mineral Products

National ID	Qualification Title	Nominal Hours
PMC20110	Certificate II in Manufactured Mineral Products	480
PMC30110	Certificate III in Manufactured Mineral Products	741
PMC40110	Certificate IV in Manufactured Mineral Products	872
PMC50110	Diploma of Manufactured Mineral Products	467
PMC60110	Advanced Diploma of Manufactured Mineral Products	787
PMC70110	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 PMC10 Manufactured Mineral Products Training Package.

National ID	Unit Title	Nominal Hours
PMC552002C	Operate equipment to blend/mix materials	30
PMC552003C	Operate grinding equipment	40
PMC552004C	Prepare for production	20
PMC552005C	Process greenware/green products	20
PMC552006C	Operate an autoclave	20
PMC552007B	Heat accelerate the curing of precast concrete	60
PMC552008B	Operate crushing equipment	40
PMC552010C	Operate a calcining kiln	40
PMC552020C	Operate slip casting equipment	30
PMC552021C	Operate manual glazing equipment	30
PMC552022C	Prepare materials for clay and ceramic production	30
PMC552023C	Finish products after firing	20
PMC552024C	Hand mould products	30
PMC552030C	Operate a firing kiln	30
PMC552031C	Operate extrusion equipment	30
PMC552032C	Operate pressing equipment	30
PMC552040C	Operate glass melting process	50
PMC552041C	Operate process ovens	40
PMC552042C	Operate blown insulation equipment	50
PMC552043C	Operate float forming equipment	50
PMC552044C	Operate fibre forming equipment	50
PMC552045C	Operate container forming equipment	40
PMC552046C	Operate glass printing equipment	40
PMC552047C	Operate primary annealing equipment	50
PMC552048C	Operate glass finishing equipment	40
PMC552049C	Operate on-line stacking and assembly equipment	40
PMC552050C	Schedule, cut and bend reinforcement	40
PMC552051C	Finish green concrete products	40
PMC552052C	Cast moulded concrete products	40
PMC552053C	Finish cured concrete products	40
PMC552054C	Spin concrete pipes	40
PMC552055C	Conduct benching operations	40
PMC552056B	Assemble, fabricate and place reinforcement	30
PMC552057B	Finish casting operation	20
PMC552058B	Demould concrete products	20
PMC552060C	Batch mix concrete	30
PMC552061C	Deliver concrete to site	30
PMC552065B	Prepare asphalt	40
PMC552070B	Operate forming equipment	40
PMC552071B	Operate wet and dry end equipment	0
PMC552072B	Produce fibrous plasterboard	30
PMC552090B	Use and maintain tools and equipment for refractory operations	30
PMC552091B	Prepare for, install and repair refractory brickwork/blockwork	40
PMC552092B	Prepare for and install mouldable refractory materials	40
PMC552093B	Prepare for and cast refractory materials	40
PMC552094B	Prepare for and apply shotcrete for installation	40
PMC552095B	Prepare for, install and repair ceramic fibre	40

National ID	Unit Title	Nominal Hours
PMC553000C	Set up and tune a process	40
PMC553010C	Process raw meal into product	50
PMC553020C	Prepare moulds and dies	40
PMC553021C	Set up and tune glazing equipment	50
PMC553040C	Set up and optimise glass forming process	80
PMC553041C	Set up and optimise glass furnace process	80
PMC553042C	Set up and optimise secondary process	40
PMC553050C	Produce architectural precast concrete	50
PMC553051B	Produce structural precast concrete	60
PMC553070B	Design and construct moulds for fibrous plaster products	40
PMC553072B	Model fibrous plaster products	60
PMC553080B	Set up and optimise finishing process	30
PMC554020D	Design and prepare models, moulds and dies	40
PMC554090B	Undertake simple refractory design	40
PMC554091B	Analyse refractory failures	30
PMC555030C	Analyse equipment performance	50
PMC555031B	Choose materials for an application	50
PMC556031C	Design structural/mechanical components	0
PMC557001A	Manage trials	35
PMC557090A	Select refractory materials for an application	45
PMC557091A	Design a refractory lining	45
PMC557092A	Specify and interpret refractory tests	35
PMC557093A	Design a refractory/ceramic component	35
PMC557094A	Investigate refractory failures	35
PMC557095A	Specify and monitor the installation of monolithic/castable refractories	35
PMC557096A	Specify and monitor the installation of block/precast refractories	35
PMC557097A	Specify and monitor repairs to refractory installations	35
PMC557098A	Specify refractory installation systems	35
PMC561072C	Store materials for production	15
PMC561080B	Organise self	15
PMC562070B	Move materials	40
PMC562071C	Operate bulk materials handling equipment	40
PMC562075B	Maintain kiln refractory	20
PMC562081B	Deliver customer service	20
PMC562083C	Allocate and complete team tasks	20
PMC563081C	Carry out stock control	20

Mapping Qualifications

The following table provides an overview of the qualifications from the PMC10 Manufactured Mineral Products which replaces qualifications from the existing version of the PMC04 Manufactured Mineral Products Training Package

PMC04 Current Qualification				PMC10 Replacement Qualification		
National ID	Qualification Title	Hours		National ID	Qualification Title	Hours
PMC10104	Certificate I in Manufactured Mineral Products		Not carried forward		MSA10207 Certificate I in Process Manufacturing is an equivalent qualification	
PMC20104	Certificate II in Manufactured Mineral Products	400	Equivalent	PMC20110	Certificate II in Manufactured Mineral Products	480
PMC20204	Certificate II in Production Support		Not carried forward		MSA20107 Certificate II in Process Manufacturing is an equivalent qualification	
PMC30104	Certificate III in Manufactured Mineral Products	665	Not equivalent	PMC30110	Certificate III in Manufactured Mineral Products	741
PMC30204	Certificate III in Production Support		Not carried forward		MSA30107 Certificate III in Process Manufacturing is an equivalent qualification	
PMC40104	Certificate IV in Manufactured Mineral Products	885	Not equivalent	PMC40110	Certificate IV in Manufactured Mineral Products	872
PMC50104	Diploma of Manufactured Mineral Products	1120	Not equivalent	PMC50110	Diploma of Manufactured Mineral Products	467
PMC60104	Advanced Diploma of Manufactured Mineral Products	0	Not equivalent	PMC60110	Advanced Diploma of Manufactured Mineral Products	787
	No Previous Equivalent			PMC70110	Graduate Certificate In Refractories Engineering	421

Mapping Units of Competency

The following table provides an overview of the units of competency from the PMC04 Manufactured Mineral Products Training Package which are replaced by the units of competency from the PMC10 Manufactured Mineral Products

PMC04			PMC10		
National ID	Units of Competency Title	Hours	National ID	Units of Competency Title	Hours
PMCOPS202B	Operate equipment to blend/mix materials	30	PMC552002C	Operate equipment to blend/mix materials	30
PMCOPS203B	Operate grinding equipment	40	PMC552003C	Operate grinding equipment	40
PMCOPS204B	Prepare for production	20	PMC552004C	Prepare for production	20
PMCOPS205B	Process greenware/green products	20	PMC552005C	Process greenware/green products	20
PMCOPS206B	Operate an autoclave	20	PMC552006C	Operate an autoclave	20
PMCOPS207A	Heat accelerate the curing of precast concrete	60	PMC552007B	Heat accelerate the curing of precast concrete	60
PMCOPS208A	Operate crushing equipment	40	PMC552008B	Operate crushing equipment	40
PMCOPS210B	Operate a Calcining kiln	40	PMC552010C	Operate a calcining kiln	40
PMCOPS220B	Operate slip casting equipment	30	PMC552020C	Operate slip casting equipment	30
PMCOPS221B	Operate manual glazing equipment	30	PMC552021C	Operate manual glazing equipment	30
PMCOPS222B	Prepare materials for clay and ceramic production	30	PMC552022C	Prepare materials for clay and ceramic production	30
PMCOPS223B	Finish products after firing	20	PMC552023C	Finish products after firing	20
PMCOPS224B	Hand mould products	30	PMC552024C	Hand mould products	30
PMCOPS230B	Operate a firing kiln	30	PMC552030C	Operate a firing kiln	30
PMCOPS231B	Operate extrusion equipment	30	PMC552031C	Operate extrusion equipment	30
PMCOPS232B	Operate pressing equipment	30	PMC552032C	Operate pressing equipment	30
PMCOPS240B	Operate melting process	50	PMC552040C	Operate glass melting process	50
PMCOPS241B	Operate process ovens	40	PMC552041C	Operate process ovens	40
PMCOPS242B	Operate blown insulation equipment	50	PMC552042C	Operate blown insulation equipment	50
PMCOPS243B	Operate float forming equipment	50	PMC552043C	Operate float forming equipment	50
PMCOPS244B	Operate fibre forming equipment	50	PMC552044C	Operate fibre forming equipment	50
PMCOPS245B	Operate container forming equipment	40	PMC552045C	Operate container forming equipment	40
PMCOPS246B	Operate glass printing equipment	40	PMC552046C	Operate glass printing equipment	40
PMCOPS247B	Operate primary annealing equipment	50	PMC552047C	Operate primary annealing equipment	50
PMCOPS248B	Operate glass finishing equipment	40	PMC552048C	Operate glass finishing equipment	40
PMCOPS249B	Operate on-line stacking and assembly equipment	40	PMC552049C	Operate on-line stacking and assembly equipment	40

PMC04			PMC10		
National ID	Units of Competency Title	Hours	National ID	Units of Competency Title	Hours
PMCOPS250B	Schedule, cut and bend reinforcement	40	PMC552050C	Schedule, cut and bend reinforcement	40
PMCOPS251B	Finish green concrete products	40	PMC552051C	Finish green concrete products	40
PMCOPS252B	Cast moulded concrete products	40	PMC552052C	Cast moulded concrete products	40
PMCOPS253B	Finish cured concrete products	40	PMC552053C	Finish cured concrete products	40
PMCOPS254B	Spin concrete pipes	40	PMC552054C	Spin concrete pipes	40
PMCOPS255B	Conduct benching operations	40	PMC552055C	Conduct benching operations	40
PMCOPS256A	Assemble, fabricate and place reinforcement	30	PMC552056B	Assemble, fabricate and place reinforcement	30
PMCOPS257A	Finish casting operation	20	PMC552057B	Finish casting operation	20
PMCOPS258A	Demould concrete products	20	PMC552058B	Demould concrete products	20
PMCOPS260B	Batch mix concrete	30	PMC552060C	Batch mix concrete	30
PMCOPS261B	Deliver concrete to site	30	PMC552061C	Deliver concrete to site	30
PMCOPS265A	Prepare asphalt	40	PMC552065B	Prepare asphalt	40
PMCOPS270A	Operate forming equipment	40	PMC552070B	Operate forming equipment	40
PMCOPS271A	Operate wet and dry end equipment	50	PMC552071B	Operate wet and dry end equipment	50
PMCOPS272A	Produce fibrous plasterboard	30	PMC552072B	Produce fibrous plasterboard	30
PMCOPS290A	Use and maintain tools and equipment for refractory operations	30	PMC552090B	Use and maintain tools and equipment for refractory operations	30
PMCOPS291A	Prepare for, install and repair refractory brickwork/blockwork	40	PMC552091B	Prepare for, install and repair refractory brickwork/blockwork	40
PMCOPS292A	Prepare for and install mouldable refractory materials	40	PMC552092B	Prepare for and install mouldable refractory materials	40
PMCOPS293A	Prepare for and cast refractory materials	40	PMC552093B	Prepare for and cast refractory materials	40
PMCOPS294A	Prepare for and apply shotcrete for installation	40	PMC552094B	Prepare for and apply shotcrete for installation	40
PMCOPS295A	Prepare for, install and repair ceramic fibre	40	PMC552095B	Prepare for, install and repair ceramic fibre	40
PMCOPS300B	Set up and tune a process	40	PMC553000C	Set up and tune a process	40
PMCOPS310B	Process raw meal into product	50	PMC553010C	Process raw meal into product	50
PMCOPS320B	Prepare moulds and dies	40	PMC553020C	Prepare moulds and dies	40
PMCOPS321B	Set up and tune glazing equipment	50	PMC553021C	Set up and tune glazing equipment	50
PMCOPS340B	Set up and optimise glass forming process	80	PMC553040C	Set up and optimise glass forming process	80
PMCOPS341B	Set up and optimise glass furnace process	80	PMC553041C	Set up and optimise glass furnace process	80
PMCOPS342B	Set up and optimise secondary process	40	PMC553042C	Set up and optimise secondary process	40
PMCOPS350B	Produce architectural precast concrete	50	PMC553050C	Produce architectural precast concrete	50
PMCOPS351A	Produce structural precast concrete	60	PMC553051B	Produce structural precast concrete	60
PMCOPS370A	Design and construct moulds for fibrous plaster products	40	PMC553070B	Design and construct moulds for fibrous plaster products	40

PMC04			PMC10		
National ID	Units of Competency Title	Hours	National ID	Units of Competency Title	Hours
PMCOPS372A	Model fibrous plaster products	60	PMC553072B	Model fibrous plaster products	60
PMCOPS380A	Set up and optimise finishing process	30	PMC553080B	Set up and optimise finishing process	30
PMCOPS420C	Design and prepare models, moulds and dies	40	PMC554020D	Design and prepare models, moulds and dies	40
PMCOPS490A	Undertake simple refractory design	40	PMC554090B	Undertake simple refractory design	40
PMCOPS491A	Analyse refractory failures	30	PMC554091B	Analyse refractory failures	30
PMCOPS530B	Analyse equipment performance	50	PMC555030C	Analyse equipment performance	50
PMCOPS531A	Choose materials for an application	50	PMC555031B	Choose materials for an application	50
PMCOPS631B	Design structural/mechanical components	0	PMC556031C	Design structural/mechanical components	50
	No Previous Equivalent		PMC557001A	Manage trials	35
	No Previous Equivalent		PMC557090A	Select refractory materials for an application	45
	No Previous Equivalent		PMC557091A	Design a refractory lining	45
	No Previous Equivalent		PMC557092A	Specify and interpret refractory tests	35
	No Previous Equivalent		PMC557093A	Design a refractory/ceramic component	35
	No Previous Equivalent		PMC557094A	Investigate refractory failures	35
	No Previous Equivalent		PMC557095A	Specify and monitor the installation of monolithic/castable refractories	35
	No Previous Equivalent		PMC557096A	Specify and monitor the installation of block/precast refractories	35
	No Previous Equivalent		PMC557097A	Specify and monitor repairs to refractory installations	35
	No Previous Equivalent		PMC557098A	Specify refractory installation systems	35
PMCSUP172B	Store materials for production	15	PMC561072C	Store materials for production	15
PMCSUP180A	Organise self	15	PMC561080B	Organise self	15
PMCSUP270A	Move materials	40	PMC562070B	Move materials	40
PMCSUP271B	Operate bulk materials handling equipment	40	PMC562071C	Operate bulk materials handling equipment	40
PMCSUP275A	Maintain kiln refractory	20	PMC562075B	Maintain kiln refractory	20
PMCSUP281A	Deliver customer service	20	PMC562081B	Deliver customer service	20
PMCSUP283B	Allocate and complete team tasks	20	PMC562083C	Allocate and complete team tasks	20
PMCSUP381B	Carry out stock control	20	PMC563081C	Carry out stock control	20

Traineeships

The following table provides a summary of the qualifications in the PMC10 Manufactured Mineral Products Training Package and the accredited traineeship courses they will replace.

PMC04 Current Qualification				PMC10 Replacement Qualification		
National ID	Qualification Title		Hours	National ID	Qualification Title	Hours
PMC20104	Certificate II in Manufactured Mineral Products	Process Manufactured Mineral Products (Level 2)	400	PMC20110	Certificate II in Manufactured Mineral Products	480
PMC30104	Certificate III in Manufactured Mineral Products	Process Manufactured Mineral Products (Level 3)	665	PMC30110	Certificate III in Manufactured Mineral Products	741
PMC40104	Certificate IV in Manufactured Mineral Products	Process Manufactured Mineral Products (Level 4)	885	PMC40110	Certificate IV in Manufactured Mineral Products	872