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**SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)**

In accordance with Regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Engineering

registered by Organising Field 06 – Manufacturing, Engineering and Technology, publishes the following Unit Standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Unit Standards. The full Unit Standards can be accessed via the SAQA web-site at www.saq.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Unit Standards should reach SAQA at the address below and **no later than 11 April 2008**. All correspondence should be marked **Standards Setting – Engineering** and addressed to

The Director: Standards Setting and Development
SAQA

Attention: Mr. D. Mphuthing

Postnet Suite 248

Private Bag X06

Waterkloof

0145

or faxed to 012 – 431-5144

e-mail: dmphuthing@saqa.org.za

DR. S. BHIKHA

DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Design fire alarm and detection systems***

SAQA US ID		UNIT STANDARD TITLE	
255717		Design fire alarm and detection systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 6	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of commissioning fire alarm and detection systems.

SPECIFIC OUTCOME 2

Activate and test fire alarm and detection systems.

SPECIFIC OUTCOME 3

Inspect fire alarm and detection systems.

SPECIFIC OUTCOME 4

Certify fire alarm and detection systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Commission passive fire protection systems***

SAQA US ID		UNIT STANDARD TITLE	
255735		Commission passive fire protection systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 6	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of commissioning passive fire protection systems.

SPECIFIC OUTCOME 2

Activate and test passive fire protection systems.

SPECIFIC OUTCOME 3

Inspect passive fire protection systems.

SPECIFIC OUTCOME 4

Certify passive fire protection systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Commission aerosol fire extinguishing systems***

SAQA US ID	UNIT STANDARD TITLE		
255715	Commission aerosol fire extinguishing systems		
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 6	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of commissioning aerosol fire extinguishing systems.

SPECIFIC OUTCOME 2

Activate and test aerosol fire extinguishing systems.

SPECIFIC OUTCOME 3

Inspect aerosol fire extinguishing systems.

SPECIFIC OUTCOME 4

Certify aerosol fire extinguishing systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Commission water sprinkler systems***

SAQA US ID		UNIT STANDARD TITLE	
255699		Commission water sprinkler systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 6	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of commissioning water sprinkler systems.

SPECIFIC OUTCOME 2

Activate and test water sprinkler systems.

SPECIFIC OUTCOME 3

Inspect water sprinkler systems.

SPECIFIC OUTCOME 4

Certify water sprinkler systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Commission powder fire extinguishing systems***

SAQA US ID		UNIT STANDARD TITLE	
255714		Commission powder fire extinguishing systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 6	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of commissioning powder fire extinguishing systems.

SPECIFIC OUTCOME 2

Activate and test powder fire extinguishing systems.

SPECIFIC OUTCOME 3

Inspect powder fire extinguishing systems.

SPECIFIC OUTCOME 4

Certify powder fire extinguishing systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Commission foam fire extinguishing systems***

SAQA US ID	UNIT STANDARD TITLE		
255702	Commission foam fire extinguishing systems		
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 6	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of commissioning foam fire extinguishing systems.

SPECIFIC OUTCOME 2

Activate and test foam fire extinguishing systems.

SPECIFIC OUTCOME 3

Inspect foam fire extinguishing systems.

SPECIFIC OUTCOME 4

Certify foam fire extinguishing systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Commission smoke control systems***

SAQA US ID		UNIT STANDARD TITLE	
255705		Commission smoke control systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 6	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of commissioning smoke control systems.

SPECIFIC OUTCOME 2

Activate and test smoke control systems.

SPECIFIC OUTCOME 3

Inspect smoke control systems.

SPECIFIC OUTCOME 4

Certify smoke control systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Commission mechanical fixed gaseous fire extinguishing systems***

SAQA US ID		UNIT STANDARD TITLE	
255700		Commission mechanical fixed gaseous fire extinguishing systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 6	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of commissioning mechanical fixed gaseous fire extinguishing systems.

SPECIFIC OUTCOME 2

Activate and test mechanical fixed gaseous fire extinguishing systems.

SPECIFIC OUTCOME 3

Inspect mechanical fixed gaseous fire extinguishing systems.

SPECIFIC OUTCOME 4

Certify mechanical fixed gaseous fire extinguishing systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Commission electrical fixed gaseous fire extinguishing systems***

SAQA US ID	UNIT STANDARD TITLE		
255703	Commission electrical fixed gaseous fire extinguishing systems		
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 6	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of commissioning electrical fixed gaseous fire extinguishing systems.

SPECIFIC OUTCOME 2

Activate and test electrical fixed gaseous fire extinguishing systems.

SPECIFIC OUTCOME 3

Inspect electrical fixed gaseous fire extinguishing systems.

SPECIFIC OUTCOME 4

Certify electrical fixed gaseous fire extinguishing systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Design fire alarm and detection systems***

SAQA US ID		UNIT STANDARD TITLE	
255716		Design fire alarm and detection systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 7	16

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of fire alarm and detection system design.

SPECIFIC OUTCOME 2

Research design requirements.

SPECIFIC OUTCOME 3

Stipulate design requirements.

SPECIFIC OUTCOME 4

Communicate design criteria.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Design passive fire protection systems***

SAQA US ID		UNIT STANDARD TITLE	
255734		Design passive fire protection systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 7	16

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of passive fire protection system design.

SPECIFIC OUTCOME 2

Research design requirements.

SPECIFIC OUTCOME 3

Stipulate design requirements.

SPECIFIC OUTCOME 4

Communicate design criteria.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Design aerosol fire extinguishing systems***

SAQA US ID		UNIT STANDARD TITLE	
255704		Design aerosol fire extinguishing systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 7	2

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of aerosol fire extinguishing system design.

SPECIFIC OUTCOME 2

Research design requirements.

SPECIFIC OUTCOME 3

Stipulate design requirements.

SPECIFIC OUTCOME 4

Communicate design criteria.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Design water sprinkler systems***

SAQA US ID		UNIT STANDARD TITLE	
255697		Design water sprinkler systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 7	16

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of water sprinkler system design.

SPECIFIC OUTCOME 2

Research design requirements.

SPECIFIC OUTCOME 3

Stipulate design requirements.

SPECIFIC OUTCOME 4

Communicate design criteria.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Design powder fire extinguishing systems

SAQA US ID		UNIT STANDARD TITLE	
255696		Design powder fire extinguishing systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 7	10

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of powder fire extinguishing system design.

SPECIFIC OUTCOME 2

Research design requirements.

SPECIFIC OUTCOME 3

Stipulate design requirements.

SPECIFIC OUTCOME 4

Communicate design criteria.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Design foam fire extinguishing systems

SAQA US ID		UNIT STANDARD TITLE	
255695		Design foam fire extinguishing systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 7	16

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of foam fire extinguishing system design.

SPECIFIC OUTCOME 2

Research design requirements.

SPECIFIC OUTCOME 3

Stipulate design requirements.

SPECIFIC OUTCOME 4

Communicate design criteria.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Design smoke control systems***

SAQA US ID		UNIT STANDARD TITLE	
255698		Design smoke control systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 7	16

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of smoke control system design.

SPECIFIC OUTCOME 2

Research design requirements.

SPECIFIC OUTCOME 3

Stipulate design requirements.

SPECIFIC OUTCOME 4

Communicate design criteria.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Design mechanical fixed gaseous fire extinguishing systems***

SAQA US ID		UNIT STANDARD TITLE	
255694		Design mechanical fixed gaseous fire extinguishing systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 7	10

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of mechanical fixed gaseous fire extinguishing system design.

SPECIFIC OUTCOME 2

Research design requirements.

SPECIFIC OUTCOME 3

Stipulate design requirements.

SPECIFIC OUTCOME 4

Communicate design criteria.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Design electrical fixed gaseous fire extinguishing systems***

SAQA US ID		UNIT STANDARD TITLE	
255701		Design electrical fixed gaseous fire extinguishing systems	
ORIGINATOR		PROVIDER	
SGB Engineering			
FIELD		SUBFIELD	
6 - Manufacturing, Engineering and Technology		Engineering and Related Design	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 7	10

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate knowledge of electrical fixed gaseous fire extinguishing system design.

SPECIFIC OUTCOME 2

Research design requirements.

SPECIFIC OUTCOME 3

Stipulate design requirements.

SPECIFIC OUTCOME 4

Communicate design criteria.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

None