



Upgrading Pathways for Construction Workforce

2017 Edition

CONSTRUCTION REGISTRATION OF TRADESMEN (CORETRADE) SCHEME

What is it?

The **Construction Registration of Tradesmen (CoreTrade) Scheme** was introduced to allow the built environment sector to build up its core group of competent and experienced workers in key construction trades and supervisory roles to anchor and lead the construction workforce, and raise its quality and productivity levels.

Who is it for?

CoreTrade provides a platform to retain the better and more experienced workers by providing a clear career progression path and giving them due recognition. It allows one to progress from a “Basic Skilled” R2 worker, to a registered CoreTrade Tradesman specializing in specific trades, a registered CoreTrade Trade Foreman and eventually a CoreTrade Supervisor. CoreTrade personnel are qualified as “Higher Skilled” R1 workers under the Ministry of Manpower (MOM)’s Foreign Worker Levy Scheme.

What are the registration requirements?

Type of personnel	Minimum years of local construction experience	Practical Test	Theory Test
CoreTrade Tradesmen	4 years	Pass	Not applicable ^{1,2}
CoreTrade Foremen	6 years	Pass	Pass ²
CoreTrade Supervisor	8 years	Not applicable	Pass

The trade categories available for registration are listed below.

CoreTrade Personnel	Trade Category	
Tradesmen & Foremen	Air-conditioning Ducting Installation Cladding & Curtain Wall Installation Construction Plant Operation (for Tradesmen only) Doors & Windows Installation Drywall Installation Electrical Works Fire Protection Works Gas Pipefitting Works Glazing Works	Joinery Works Lift Installation Plumbing And Piping Works Reinforced Concrete Works Structural Steel Works Suspended Ceiling Installation Tiling, Stone Laying & Floor Finishing Works Waterproofing Works
Supervisor	Architectural Works, Structural Works, and Mechanical & Electrical (M&E) Works	

Continuing Education & Training (CET) is required for the renewal of CoreTrade personnel.

How to apply?

CoreTrade applications are to be made by Employers via <https://www.bca.gov.sg/cwrs/> before registering the construction personnel for training and skills assessment at BCA’s Approved Training and Testing Centres³.

¹ Theory Test is required only for Tradesmen in Construction Plant Operation and enhanced formwork related trades to ascertain the safety knowledge.

² The enhanced formwork-related trades in CoreTrade Tradesmen and Foremen have integrated the Formwork Safety course for Workers

³ Please refer to page 7 on more information of BCA’s Approved Training and Testing Centres.

MULTI-SKILLING SCHEME

What is it and Who is it for?

The **Multi-Skilling Scheme** was introduced in 2012 to build up a pool of experienced workers, who are competent in multiple construction trades to carry out more than one type of work tasks on-site. Employers will have greater flexibility in deploying multi-skilled workers on-site, hence reducing the downtime and improving their productivity. Construction personnel registered under the Multi-Skilling Scheme are qualified as “Higher Skilled” R1 workers under the Ministry of Manpower (MOM)’s Foreign Worker Levy Scheme.

What are the registration requirements?

There are 2 approaches to be registered as a Multi-skilling personnel as described in the sections below:

Approach 1

The eligibility criteria are:

- a. Obtain at least 4 years of construction experience in Singapore; and
- b. Obtain certification in a 2nd SEC(K) trade skills (see Table A) that is different from the 1st SEC(K)/SEC trade skills⁴.
- c.

Table A List of SEC(K) trade skills recognised as 2nd certificate under the Multi-Skilling Scheme

1. Aircon Piping Installation	26. Glazing	51. Precision Blocklaying and Wall Panel Installation
2. Aluminium Formwork	27. Guniting	52. Prestressing
3. Asphalt Concrete Paving	28. Hydraulic Excavator Operation	53. Soil Drilling & instrumentation
4. Bored Micro-Piling Operation	29. Hydraulic Excavator Operation (as Lifting Machine)	54. Steel Reinforcement Work
5. Bored Piling Operation	30. Interior Drywall Installation	55. Structural Steel Fitting
6. Bricklaying	31. Interlocking Blocks Pavement Construction	56. Suspended Ceiling Installation (Acoustical)
7. Cladding Installation	32. Interior Gas Pipefitting	57. Suspended Ceiling Installation (Fibrous Plaster)
8. Construction Plant Operation (Bulldozer Operation)	33. Jack-in Piling Operation	58. Suspended Scaffold Installation (Mast Climbing Platform)
9. Construction Plant Operation (Excavator Loader Operation)	34. Jet Grout Piling Operation	59. Suspended Scaffold Installation (Gondola)
10. Construction Plant Operation (Track Shovel Operation)	35. Joinery	60. System Formwork Installation
11. Crawler Crane Operation	36. Lift Installation	61. Telescopic Handler Operation
12. Crawler Drill Operation	37. Marine Dredging Plant Operation	62. Thermal Insulation
13. Curtain Wall Installation	38. Marine Driven Piling Operation	63. Tiling
14. Deep Cement Mixing Operation	39. Marine Sand Compaction Piling Operation	64. Timber Flooring
15. Doors & Windows Installation (Timber)	40. Metal Scaffold Erection	65. Timber Formwork
16. Doors and Windows Installation (Aluminium)	41. Metal Scaffold Erection (System Scaffold)	66. Tower Crane (Luffing Jib) Operation
17. Driven Piling Operation	42. Metal Scaffold Erection (Tubular Scaffold)	67. Tower Crane (Saddle Jib) Operation
18. Ducting Installation for Air-Conditioning and Ventilation	43. Mobile Crane Operation	68. Trenchless Pipe Installation
19. Electrical Wiring Installation	44. Painting	69. Tunnel Boring Machine (Earth Pressure Method)
20. Enhanced Aluminium Formwork	45. Pipefitting	70. Tunnel Boring Machine (Slurry Method)
21. Enhanced System Formwork	46. Plastering	71. Underground Pipe-Jacking
22. Enhanced Timber Formwork	47. Plumbing & Pipefitting	72. Waterproofing
23. Fibre Optics Installation	48. Precast Concrete Component Erection	73. Welding
24. Fire Sprinkler Installation	49. Precast Concrete Component Erection (with Tower Crane Hoist)	74. Mini Crane Operation
25. Gas Pipefitting	50. Precast Kerb and Drain Laying	

⁴ Other than the SEC/SEC(K) certification, the SPM certificate is recognized as the first certification.

Approach 2

The eligibility criteria are

- a) Obtain at least 6 years of construction experience in Singapore; and
- b) Completed 120 hours of training in approved safety-related courses (see Table B);
OR obtained WSQ Advanced Certificate in Workplace Safety and Health.

Table B List of identified courses & respective hours considered

Important Note: Of the total 120 training hours, minimum 50 hours to be attained from courses listed from 1 to 14

S/N	Course Title	Hours considered
1	Assess Confined Space for Safe Entry and Work	40
2	Building Construction Supervisors Safety Course	38
3	Building Construction Supervisors Safety Course (Tunnelling)	15
4	Compressed Air Works Course (Man Lock Attendant)	44
5	Compressed Air Works Course (Medical Lock Attendant)	62
6	Formwork Safety Course for Supervisors	32
7	Lifting Supervisor Safety Courses	32
8	Manhole Safety Assessor Course	30
9	Occupational First Aid Course	23.5
10	Supervise Work in Confined Space Operation	21
11	Supervision of Metal Scaffold Erection Course	75
12	Suspended Scaffold Supervisor Course	32
13	Work-at-Height Course for Assessors	8.5
14	Work-at-Height Course for Supervisors	16
15	Explosive Powered Tools Operator Course	8
16	Formwork Safety Course for Workers	7
17	Metal Scaffold Erection Course	37.5
18	Mobile Elevating Work Platform (MEWP) Boom Lift Operator Course	8
19	Mobile Elevating Work Platform (MEWP) Scissors Lift Operator Course	8
20	Perform Work in Confined Space Operation	14
21	Rigger Course	16
22	Signalmen Course	9
23	Suspended Scaffold Rigger Course	24
24	Work-at-Height Course for Workers	9

Continuing Education & Training (CET) is required for the renewal of Multi-skilling Registration.

How to apply?

Applications are to be made by Employers via <https://www.bca.gov.sg/cwrs/> after taking the 2nd SEC(K) trade skills evaluation with BCA's Approved Training and Testing Centres⁵.

⁵ Please refer to page 7 on more information of BCA's Approved Training and Testing Centres.

MARKET-BASED SKILLS RECOGNITION FRAMEWORK

What is it and Who is it for?

In Aug 2014, a new Market-Based Skills Recognition framework (MBF) for the construction sector was introduced to help retain workers with better skills and experience. Under the new framework, “Basic Skilled” R2 workers who have worked in Singapore for at least six years and who earn a fixed monthly salary of at least \$1,600 will be allowed to upgrade to the “Higher Skilled” R1 status.

What are the requirements?

Work Permit Holders must have worked in Singapore for at least six years and who earn a fixed monthly salary of at least \$1,600. More details can be found from MOM’s website, <http://www.mom.gov.sg/>.

DIRECT R1 PATHWAY

What is it?

The Direct R1 Pathway aims to allow workers, who may not have acquired the necessary years of local construction experience but have higher skills, to upgrade to “Higher Skilled” R1 construction workers.

What are the requirements?

Work Permit Holders must pass the SEC(K) test taken from 1 Sep 2015 onwards and passed at higher skill level and be paid a fixed monthly salary of at least \$1,600. Direct R1 workers are required to attend Continuing Education and Training (CET) once every 2 years to renew their R1 eligibility.

Where to take the test?

Please refer to page 7 on the list of Approved Training and Testing Centres.

How to apply?

Applications can be made at BCA’s Approved Training and Testing Centres⁶ for Direct R1 skills assessment.

⁶ Please refer to page 7 on more information of BCA’s Approved Training and Testing Centres.

CONTINUING EDUCATION AND TRAINING

What is it?

The objective of Continuing Education and Training (CET) is to continuously upgrade the construction workforce to support improvement in productivity, quality and safety. The CET will be a half-day to 1 day⁷ course covering the latest codes and regulations, good practices, and demonstration of new methods, materials, tools and equipment relevant to the specific construction trades and/or areas of responsibility of the registered personnel.

BCA has appointed 32 ATTCs to conduct CET for the 18 CoreTrade trade categories. For the list of ATTCs offering the CET, including that offered by BCAA, please refer to this website www.bca.gov.sg/CoreTrade/others/ATTCcontacts.pdf.

Who is it for?

All personnel registered under CoreTrade and Multi-Skilling Schemes or upgraded through the Direct R1 pathway, are required to attend CET for the renewal of registration.

How to apply?

Continuing Education and Training (CET) can be submitted to the appointed ATTCs upon the approval of renewal. Application for renewal of registration can be submitted online 3 months before the expiry date of registration.

⁷ CET duration of 1 day is required for CoreTrade Supervisors.

APPROVED TRAINING AND TESTING CENTRES

What is it?

Besides BCA Academy (BCAA), 36 Approved Training & Testing Centres (ATTCs) are also appointed to conduct training for the CoreTrade, Multi-Skilling and Direct R1 schemes. Courses offered at BCAA and ATTCs are eligible for funding support under the Workforce Training & Upgrading (WTU) Scheme. The list of fundable courses can be found at <https://www.bca.gov.sg/CoreTrade/others/ATTCfees.pdf>.

For courses conducted by BCA Academy, please refer to this website <https://www.bcaa.edu.sg>.

For courses conducted by the 36 ATTCs and their contact details, please refer to this website http://www.bca.gov.sg/SkillsTesting/ATTC_main.html.

Who is it for?

For construction personnel who wish to upgrade to “Higher Skilled” R1 construction workers through CoreTrade Scheme, Multi-Skilling Scheme and Direct R1 Pathway.

Where are they located?



WORKFORCE TRAINING AND UPGRADING (WTU) SCHEME

What is it?

The **Workforce Training and Upgrading (WTU) Scheme**, under the Construction Productivity and Capability Fund (CPCF), aims to build up a competent and productive workforce for the built environment sector at both the professional, managerial, executive and technical (PMET) level, as well as, the worker level.

The WTU Scheme co-funds up to 90% (for locals) and up to 80% (for foreigners) the costs of selected skills assessment and training courses related to construction productivity. In addition, WTU Scheme will co-fund up to 40% of the training and assessment fees (for CoreTrade and Multi-Skilling registration) for foreign workers who fail for the first time in 2015 and 2016.

Who is it for?

Firms in the built environment sector, including developers, consultants and contractors, with local or foreign workforce and are able to meet the qualifying criteria, may apply to the Scheme for funding support for training courses and assessment approved by BCA.

What are the funding levels?

Type of supportable courses	Level of funding support
(a) Selected Professional Managerial Executive and Technical personnel's (PMETs) courses that are directly related to productivity. <ul style="list-style-type: none">- For locals (Singaporeans / Singapore PRs)- For foreigners	Up to 90% Up to 40%
(b) Training and certification in selected higher value-adding qualifications at supervisory level that are approved by BCA. <ul style="list-style-type: none">- For locals (Singaporeans / Singapore PRs)- For foreigners	Up to 90% Up to 80%
(c) Training and skills assessment for CoreTrade registration. <ul style="list-style-type: none">- For locals (Singaporeans / Singapore PRs)- For foreigners	Up to 90% Up to 80%
(d) Training and skills assessment for the second SEC(K) certification leading to qualification of Multi-Skilling. <ul style="list-style-type: none">- For locals (Singaporeans / Singapore PRs)- For foreigners	Up to 90% Up to 80%

How to apply?

Applications are to be submitted via <https://www.bca.gov.sg/wtus/> by Employers before the commencement of training and test.

DEPLOYMENT OF CORETRADE PERSONNEL

What is it and Who is it for?

Under the Building Control (Amendment) Act 2007, all **licensed Class 1 General Builders** are required to lodge a manpower programme on the deployment of CoreTrade personnel when undertaking construction projects with contract value of \$20 million (inclusive of GST) or more.

What are the deployment requirements?

The CoreTrade deployment has been classified into 4 main categories of projects (as shown in the tables below). Taking into account the scale of works, the deployment requirements are also calculated based on Man-Year (MY)¹ and contract value to allow for flexibility in deployment.

¹Man-year (MY) is defined as a period comprising 260 working days or its equivalent.

Project Category	Class of CoreTrade Personnel	Type of Trades	Deployment Requirements based on total contract value (inclusive of GST)	
			1st \$100m (per \$10m)	Excess of \$100m (per \$20m)
1. New Building Works	Supervisor	Structural Trades [see Note 1]	0.25MY	0.25MY
		Non-Structural Trades [see Note 2]	0.25MY	0.25MY
		Total	0.5MY	0.5MY
2. Addition and Alteration (A&A) Works	Foreman	Structural Trades [see Note 1]	1MY	1MY
		Non-Structural Trades [see Note 2]	1MY	1MY
		Total	2MY	2MY
3. Civil Engineering Works (MRT) Works	Supervisor	Structural Trades [see Note 1]	0.25MY	0.25MY
		Non-Structural Trades [see Note 2]	0.25MY	0.25MY
		Total	0.25MY	0.25MY
4. Civil Engineering (General) Works	Trade Foreman	Structural Trades [see Note 1]	0.75MY	0.75MY
		Non-Structural Trades [see Note 2]	0.75MY	0.75MY
		Total	0.75MY	0.75MY

NOTE:

1	Structural Trades	1. Reinforced Concrete Works 2. Structural Steel Works	
2	Architectural	1. Cladding and Curtain Wall Installation 2. Doors and Windows Installation 3. Drywall Installation 4. Glazing Works 5. Joinery Works	6. Suspended Ceiling Installation 7. Tiling, Stone Laying and Floor Finishing Works 8. Waterproofing Works
	Mechanical & Electrical	1. Air-Conditioning Ducting Installation 2. Electrical Works 3. Fire Protection Works	4. Gas Pipefitting Works 5. Lift Installation 6. Plumbing and Piping Works

Where to submit?

Firms can lodge the manpower deployment plans at www.bca.gov.sg/coretrade/submission

ENQUIRIES

Where can I find more information?

Upgrading Pathways for Construction Workforce

- **Construction Registration of Tradesmen (CoreTrade) Scheme**
<https://www.bca.gov.sg/cwrs/>
- **Multi-Skilling Scheme**
<https://www.bca.gov.sg/cwrs/>
- **Market-Based Skills Recognition Framework**
<http://www.mom.gov.sg/>
- **Direct R1 Pathway**
http://www.bca.gov.sg/SkillsTesting/direct_R1.html

Approved Training and Testing Centres

- **BCA Academy**
<http://www.bcaa.edu.sg/>
- **Approved Training & Testing Centres**
http://www.bca.gov.sg/SkillsTesting/ATTC_main.html

Government Funding

- **Workforce Training And Upgrading (WTU) Scheme**
<http://www.bca.gov.sg/manpower/wtu.html>

Requirements

- **Deployment Of CoreTrade Personnel**
https://www.bca.gov.sg/CoreTrade/deployment_requirements.html

Where can I direct my enquiries to?



6248 9845



CoreTrade Scheme: bca_coretrade@bca.gov.sg

Multi-Skilling Scheme: bca_multiskill@bca.gov.sg

WTU Scheme: bca_wtu@bca.gov.sg

Approved Training and Testing Centres: bca_skills_assessment@bca.gov.sg



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The information in this publication is correct at the time of printing. Please log on to our website for updated information.

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