

Issued: November 13, 2013

**Program:** SHEET METAL WORKER

**To:** ITA Training Providers  
BC Construction Industry Training Organization (CITO)  
ACE-IT School Districts

**RE:** OPSN 2013 026  
**Launch of ITA Standardized Level Examinations**

**Timing:** Effective: March 31, 2014

**Information:** Please be advised that effective March 31, 2014, the Industry Training Authority (ITA) will be launching Standardized Level Examinations for Sheet Metal Worker Level 1, 2 & 3.

Sheet Metal Worker Level 1, 2 & 3 classes completing on or after March 31, 2014 will be required to write an ITA Standardized Level Examination.

Sheet Metal Worker Level 4 classes will write the Sheet Metal Worker Interprovincial Red Seal examination at the end of Level 4.

All Sheet Metal Worker Standardized Level Exams will be available to write through an online computer-based platform. Paper-based exams will continue if a training provider is unable to arrange a computer lab. If training providers use the online computer-based platform a computer facility must be booked for a minimum of 4 hours to accommodate the online examination writing. The location of the computer/lab must be noted on the ITA Exam Request Form.

Training providers are to follow the attached *Grading Sheet: Subject Competencies and Weightings* tables to determine an apprentice's final in-school technical training percentage score.

**Background** In 2012, ITA began launching ITA Standardized Level Examinations for a number of programs.

For each level of technical training that includes an ITA Standardized Level Exam, a training provider in-school percentage score and a standardized level exam percentage score will be blended to produce a final percentage score. The in-school percentage score will be multiplied by 80% and the exam percentage score will be multiplied by 20%. The two blended (80/20) scores will be added by ITA Direct Access to produce a final percentage score for the level of training.

Sheet Metal Worker classes will write the Level 1, 2 & 3 ITA Standardized Level Exams through an online computer-based platform or by requesting a paper-based level exam writing if a computer laboratory is unavailable.

The benefits of moving to an online platform include:

- immediate processing of exam results and a quicker turnaround for exam marks;
- increased exam protection and security with the removal of paper-based exams;
- the ability to “scramble” questions which enhances security of the exam as questions will be presented in a different sequence for each candidate;
- colour diagrams can be easily reproduced;
- diagrams in the exams can be manipulated to clarify details, i.e., zoom-in capabilities;
- a consistent evaluation process for all examinations with the ability to quickly modify or remove questions as required.

**Scheduling  
Sheet Metal  
Worker Exams  
Level 1, 2 & 3  
&  
Interprovincial  
Red Seal  
Exams**

The Sheet Metal Worker Level 1, 2 & 3 and the Sheet Metal Worker Interprovincial Red Seal exams are to be requested by training providers via the usual ITA procedure. Training providers are required to complete an ITA Examination Request Form six weeks prior to the exam scheduled date.

ITA will invigilate these exams unless other arrangements are organized between ITA’s Exam Department and the training provider.

**Training  
Provider  
Component:**

Instructors are expected to follow the *Assessment Guidelines Grading Sheet: Subject Competencies and Weightings* tables on pages 5 - 8 of this document to calculate the final in-school percentage score for each apprentice.

**In-School  
Technical  
Training  
Percentage  
Scores**

Training providers are required to enter an in-school percentage score for each apprentice into ITA Direct Access.

As per the *Grading Sheet: Subject Competencies and Weightings* tables, the in-school percentage score for Sheet Metal Worker Levels 1, 2, 3 & 4 is derived from a combination of theory and practical assessments within each training topic.

**Sheet Metal Worker Level 1, 2, 3 & 4 in-school marks are calculated by:**

- totaling the level theory competency results as noted in the competencies and weightings tables and multiplying the total by 62% to produce a weighted theory result;
- totaling the level practical competency results as noted in the competencies and weightings tables and multiplying the total by 38% to produce a weighted practical result; and
- adding the theory and practical competency results together to determine the final in-school result.

This final percentage score is entered into ITA Direct Access.

**ITA  
Component:**

ITA will enter the Standard Level Examination percentage score in ITA Direct Access.

**Calculating  
Final  
Percentage  
Scores For  
Standardized  
Level Exams  
Level 1, 2 & 3**

Once the in-school percentage score and the ITA exam percentage score have been entered into ITA Direct Access, the system will automatically calculate the final percentage score. This final percentage score is calculated by blending the standardized level exam percentage score and the in-school technical training percentage score.

The in-school technical training (combined theory & practical) percentage score is multiplied by 80% and the ITA Standardized Level Exam percentage score is multiplied by 20%. These two scores are combined to determine the percentage score that is recorded in ITA Direct Access.

A percentage score of 70% or greater is required to pass Sheet Metal Worker Level 1, 2 & 3 when the final in-school percentage score and the final ITA standardized level exam percentage score are blended.

**Program  
Results and  
Eligibility**

After the in-school percentage score and the exam percentage score are blended, there will be situations where an apprentice will have to repeat one or the other component (in-school training or exam) in order to achieve the required 70% to pass Sheet Metal Worker Level 1, 2 & 3.

In the event that this does occur, the following table outlines the three scenarios an apprentice may encounter once the 80/20 blending is applied and the final percentage score is less than 70%.

<p><b>Scenario 1</b></p> <p>The apprentice receives less than 70% for the in-school training and 70% or greater on the level exam resulting in a final score of less than 70%.</p>	<p>The apprentice will:</p> <ul style="list-style-type: none"> <li>• Re-take the level in-school technical training.</li> <li>• Receive credit for the exam.</li> </ul>
<p><b>Scenario 2</b></p> <p>The apprentice receives 70% or greater for the in-school training and less than 70% on the level exam resulting in a final score of less than 70%.</p>	<p>The apprentice will:</p> <ul style="list-style-type: none"> <li>• Receive credit for the in-school technical training.</li> <li>• Re-write the level exam per ITA exam re-write policy.</li> </ul>
<p><b>Scenario 3</b></p> <p>The apprentice receives less than 70% for the in-school training and less than 70% on the level exam resulting in a final score of less than 70%.</p>	<p>The apprentice will:</p> <ul style="list-style-type: none"> <li>• Re-take the level in-school technical training.</li> <li>• Re-write the level exam per ITA exam re-write policy.</li> </ul>

In cases where the apprentice receives a percentage score that is less than 70% for the in-school technical training and still achieves a final blended percentage score of 70% or greater, credit for the technical training will be granted.

**Calculating  
Final  
Percentage  
Scores**

**Level 4**

**Sheet Metal Worker Level 4 Examination**

Until further notice, Training Providers delivering the Sheet Metal Worker program will continue using their institution's proprietary examination in the calculation of the apprentices' achievement for Level 4. The percentage weighting of this exam is 20% of the final in-school technical training mark.

Refer to the *Grading Sheet Subject Competencies and Weightings* Level 4 table at the end of this document to determine the calculation process for completing the Level 4 in-school final percentage score.

The final percentage score for Level 4 is to be reported to ITA and must be 70% or greater to pass the level.

**Interprovincial  
Red Seal  
Examination**

In order to achieve certification with the Red Seal Endorsement, Sheet Metal Worker apprentices are required to write the Sheet Metal Worker Interprovincial Red Seal exam after completing all levels of in-school technical training. Apprentices must have passed all levels of in-school technical training or be approved challengers to sit the exam. A score of 70% or greater is required for a pass.

Training providers should request interprovincial Red Seal or exams via the usual ITA procedure.

The ITA will administer and invigilate Interprovincial Red Seal exams and score and record exam results in ITA Direct Access.

**For more  
information  
contact:**

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**Grading Sheet: Subject Competency and Weightings**

PROGRAM: IN-SCHOOL TRAINING: ITA DIRECT ACCESS CODE:		SHEET METAL WORKER LEVEL 1 0018SMSE01	
LINE	SUBJECT COMPETENCIES	THEORY WEIGHTING	PRACTICAL WEIGHTING
A	Use of Safe Work Practices	7%	0%
B	Use of Tools and Equipment	18%	32%
C	Organize Work	16%	0%
D	Layout and Develop Patterns	30%	15%
E	Fabricate Trade Related Products	23%	53%
F	Install Air Handling Systems	6%	0%
	<b>Total</b>	<b>100%</b>	<b>100%</b>
<b>Calculated by the Training Provider</b> SHEET METAL WORKER in-school theory & practical subject competency weighting		62%	38%
<b>Training Provider enters final in-school percentage score into ITA Direct Access</b>		IN-SCHOOL%	

<b>Calculated by ITA: In-school Percentage Score</b> ITA Direct Access calculates the percentage weighting once the in-school mark is entered. Combined theory and practical subject competency multiplied by	80%
<b>Calculated by ITA: Standard Level Exam Percentage Score</b> ITA Direct Access will calculate the percentage weighting once the standard level exam marks have been entered. The exam score is multiplied by	20%
<b>Calculated by ITA: Final Percentage Score</b> The final score for determining credit is calculated by ITA Direct Access.	FINAL%



PROGRAM: IN-SCHOOL TRAINING: ITA DIRECT ACCESS CODE:		SHEET METAL WORKER LEVEL 2 0018SMSE02	
LINE	SUBJECT COMPETENCIES	THEORY WEIGHTING	PRACTICAL WEIGHTING
A	Use Safe Work Practices	7%	0%
B	Use Tools and Equipment	18%	17%
C	Organize Work	16%	4%
D	Layout and develop Patterns	30%	18%
E	Fabricate Trade Related Products	19%	43%
F	Install Air Handling Systems	5%	5%
H	Install Architectural and Specialty Components	12%	13%
	<b>Total</b>	<b>100%</b>	<b>100%</b>
<b>Calculated by the Training Provider</b> <b>SHEET METAL WORKER</b> in-school theory & practical subject competency weighting		62%	38%
<b>Training Provider enters final in-school percentage score into ITA Direct Access</b>		IN-SCHOOL%	

<p><b>Calculated by ITA: In-school Percentage Score</b> ITA Direct Access calculates the percentage weighting once the in-school mark is entered. Combined theory and practical subject competency multiplied by</p>	80%
<p><b>Calculated by ITA: Standard Level Exam Percentage Score</b> ITA Direct Access will calculate the percentage weighting once the standard level exam marks have been entered. The exam score is multiplied by</p>	20%
<p><b>Calculated by ITA: Final Percentage Score</b> The final score for determining credit is calculated by ITA Direct Access.</p>	FINAL%



PROGRAM: IN-SCHOOL TRAINING: ITA DIRECT ACCESS CODE:		SHEET METAL WORKER LEVEL 3 0018SMSE03	
LINE	SUBJECT COMPETENCIES	THEORY WEIGHTING	PRACTICAL WEIGHTING
A	Use Safe Work Practices	3%	0%
B	Use Tools and Equipment	12%	18%
C	Organize Work	8%	6%
D	Layout and Develop Patterns	22%	17%
E	Fabricate Trade Related Products	13%	50%
F	Install Air Handling Systems	16%	9%
G	Install Industrial Systems	7%	0%
H	Install Architectural and Specialty Components	5%	0%
I	Service Systems	14%	0%
	<b>Total</b>	<b>100%</b>	<b>100%</b>
<b>Calculated by the Training Provider</b> <b>SHEET METAL WORKER</b> in-school theory & practical subject competency weighting		62%	38%
<b>Training Provider enters final in-school percentage score into ITA Direct Access</b>		IN-SCHOOL%	

<b>Calculated by ITA: In-school Percentage Score</b> ITA Direct Access calculates the percentage weighting once the in-school mark is entered. Combined theory and practical subject competency multiplied by	80%
<b>Calculated by ITA: Standard Level Exam Percentage Score</b> ITA Direct Access will calculate the percentage weighting once the standard level exam marks have been entered. The exam score is multiplied by	20%
<b>Calculated by ITA: Final Percentage Score</b> The final score for determining credit is calculated by ITA Direct Access.	FINAL%



PROGRAM: IN-SCHOOL TRAINING: ITA DIRECT ACCESS CODE:		SHEET METAL WORKER LEVEL 4 0018SM04	
LINE	SUBJECT COMPETENCIES	THEORY WEIGHTING	PRACTICAL WEIGHTING
A	Use Safe Work Practices	4%	0%
B	Use Tools and Equipment	12%	0%
C	Organize Work	18%	15%
D	Layout and Develop Patterns	17%	30%
E	Fabricate Trade Related Products	15%	55%
F	Install Air Handling Systems	14%	0%
G	Install Industrial Systems	10%	0%
I	Service Systems	10%	0%
	<b>Total</b>	<b>100%</b>	<b>100%</b>

Calculated by the Training Provider:		
<b>SHEET METAL WORKER</b> in-school theory & practical subject competency weighting	62%	38%
<b>Proprietary Exam Percentage Score</b> The exam score is multiplied by	20%	
<b>Training Provider enters final in-school percentage score into ITA Direct Access</b>	FINAL %	

All apprentices who complete Level 4 of the Sheet Metal Worker program with a FINAL level percentage score of 70% or greater will write the Interprovincial Red Seal examination as their final assessment.

ITA will enter the apprentices' Sheet Metal Worker Red Seal Interprovincial examination mark in ITA Direct Access. A minimum percentage score of 70% on the examination is required for a pass.