

# MULTIVER **TRAINING PLAN**

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# MTV-101 INSTRUCTOR-LED TRAINING

Quebec

Version 2.0

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 **MULTIVER**  
Cutting edge of the glass industry



# MTV-101 Instructor-Led Training

## **GENERAL INFORMATION**

### **COURSE TITLE :**

General Training on the Use of Float Glass in Architectural Applications

### **DURATION :**

75 minutes

### **GENERAL DESCRIPTION :**

The objective of this instructor-led training is to provide architects with basic technical information on float glass and insulated glass units. First, the training gives an overview of the components and manufacturing process of glass. Next follows a detailed description of insulated glass units and their components, including information regarding their respective energy efficiency. Last, we take a quick look at various related subjects that are closely associated with architectural glass. These subjects include : heat treatments, lamination, thermal stress breakage, UV degradation, and acoustic performance.



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## TRAINING PLAN

### OBJECTIVES :

Upon completion of training, participants should be able to :

1. Identify and describe the mechanisms and fundamental principles of conduction, convection and radiation heat transfer in insulated glass units.
2. Suggest ways to increase or reduce the heat transfer and/or visible light transmittance of an insulated glass unit (design) by choosing the appropriate components.
3. Describe the various treatments that can undergo glass for use in insulated glass units, and the applications associated with each of them.

### CONTENT :

MTV-101 training is divided into the following sections :

#### Introduction

Section 1 – Presentation of the Company – Multiver Ltd

Section 2 – Glass Composition

Section 3 – Glass Manufacture

#### Technical Content

Section 4 – Glass Surfaces

Section 5 – Radiation Control

Section 6 – Heat Transfer Methods

Section 7 – Insulated Glass Units

7.1 – Spacers

7.2 – Gases

Section 8 – Thermal Stress Breakage

Section 9 – Heat Treatments

Section 10 – Laminated Glass

Section 11 – Low Emissivity (Low-E) Glass

Section 12 – UV Degradation

Section 13 – Acoustic Performance

#### Question and Answer Period

Period to answer the participants' questions.

#### Formative Assessment

Simulation questions, answers and discussion.



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## TRAINING PLAN

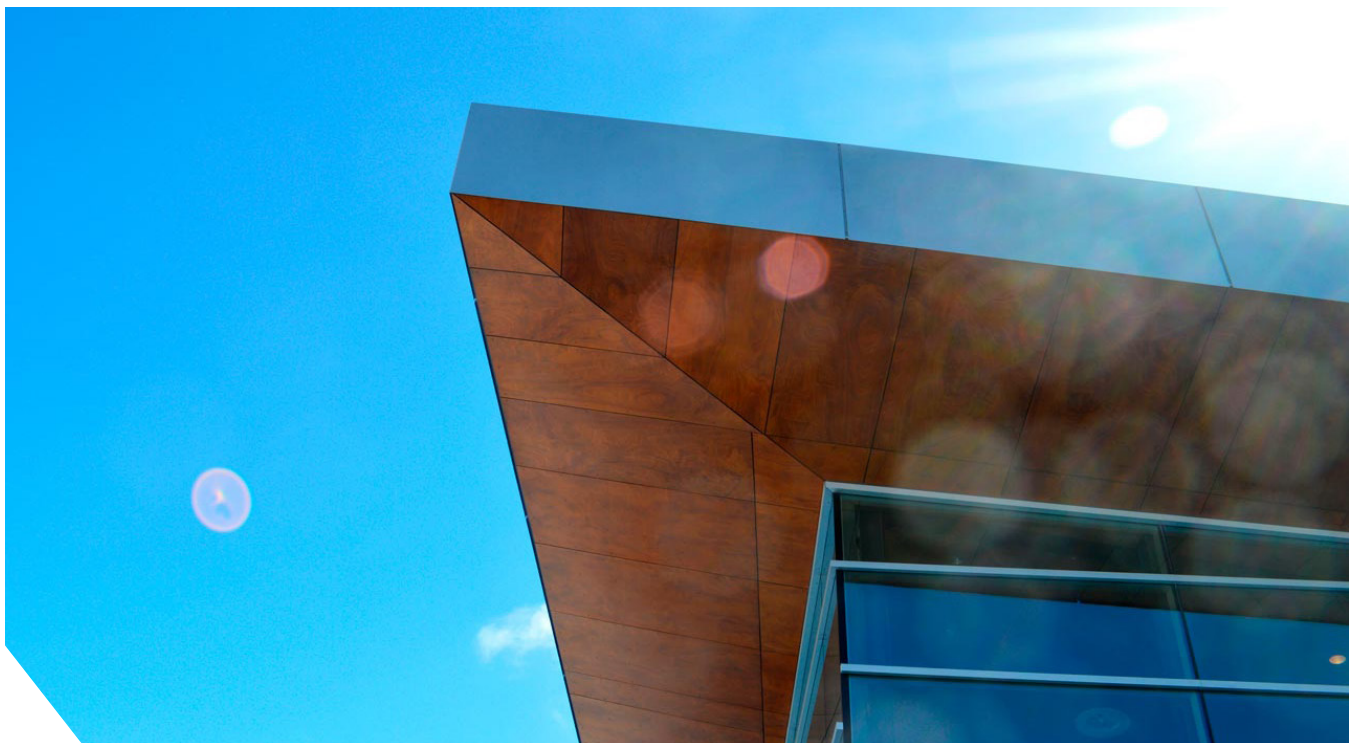
### METHODOLOGY :

This instructor-led training follows a lecture method up to Section 13 of the content described above. During the lecture period, participants are encouraged to share their comments with the instructor and ask any questions about training content. The instructor then conducts the question and answer period as well as the formative assessment.

### ASSESSMENT METHOD :

During the last fifteen minutes of the training, a questionnaire is handed out to each participant. Participants then have to answer various simulation questions on their own, before the instructor compares their answers and gives, if needed, the right answer. This method allows to ensure that training objectives have been reached by the participants and that they are now able to use available tools to select the appropriate insulated glass unit.

\*For any questions regarding the MTV-101 training plan, please contact Mr. Camil André, sales manager, by phone at (418) 687-0770 or by email at [camilandre@multiver.ca](mailto:camilandre@multiver.ca).



Tanguay Lévis - Low-e glass and ceramic frit



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