

## MME 4499 – Mechanical Engineering Capstone Project Proposal Document

Name of Sponsor	MASCO Canada
Title of Dunicot	

Title of Project

Method for detecting thin glass on bathing product composite surfaces.

## **Brief Project Description**

Bathing products (tubs, showers, etc.) get sprayed with resin and fiberglass at the backside for strength and rigidity. Whenever a customer observes light passing through the product, they assume that it is not sprayed enough and call it "thin glass", but it is just light passing through the cross joints of fiberglass.

We are looking for a device/method which can check the deflection as per CSA industry standards in a production environment or at a customer site to verify if the concerned areas are meeting the CSA requirements.

## **Desired Project Deliverables**

- 1. Project report hardcopy and digital copy
- 2. Cycle time impact
- 3. Drawings and schematics for the device and installation
- 4. Device installed and working at final inspection of both low-volume and high-volume lines.
- 5. Live data available online from the device