

Glazier Test Tool

The View Glazier Test Tool (GTT) is a portable, convenient way to test the View IGU, IGU Smart Window Connector, and cable operation. In a 30-60 second test, the GTT will indicate whether the windows, Smart Window Connector, and cables are connected and operating properly. This device should be used on all View installations as per the below instructions.

This device is designed for use by Glaziers, LVEs, and View FSEs who install and test View Smart Windows.

This guide is relevant only to the successful operation of the Glazier Test Tool. For information related to glass returns, remediations, and testing documentation, please refer to the View Glazier Quick Start Guide.

What to test:

Glaziers:

Testing upon receipt from View (required):

It is required that the glazier test the IGU's upon receipt from View. These tests that are completed before the IGU goes into the framing system do not need to utilize the grounding clip.

Testing of shop installed systems (required):

For shop built (unitized systems), it is required that glaziers test the cabling before the unitized frames are sent to the job site.

Testing upon installation (required):

This is the critical test to ensure proper final installation and is required as per View Specifications. Once the windows and any adjoining elements that could interfere with cabling have been installed, it is time to do final testing of all IGU's and record the results. The testing should be done on the IGU cable, which exits the framing system for each IGU. This test should be completed for all framing types.

Low Voltage Electricians:

Testing on cabling exiting framing system (required):

It is required that the LVE test the IGU cable leaving the framing system before connecting to any further IGU cable runs.

Cabling up to but not including the Window Controller (required):

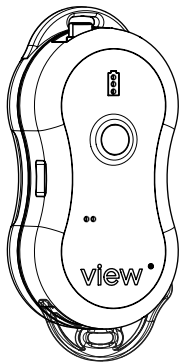
The LVE must test on the cable up to where the window controller will be connected. Note that this cable must be connected to the window in order for a valid test. Also, note that any cabling upstream of the window controller cannot be tested with the GTT.

The included ground alligator clip should be used for all testing of in frame cabling both at glazing shops (unitized) and on installed framing systems.

What is included:

Kit contains:

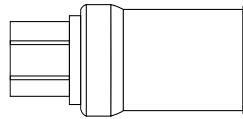
Glazier Test Tool, Smart Window Connector Caps, Alligator Clip Cable, Grounding Connector, Silicon Cover, and DC Charger



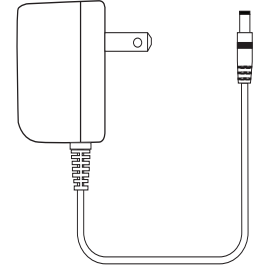
Glazier Test Tool
010-101781



Silicon Cover
020-101673



Smart Window
Connector Caps (x10)
370-101509



DC Charger
750-101502



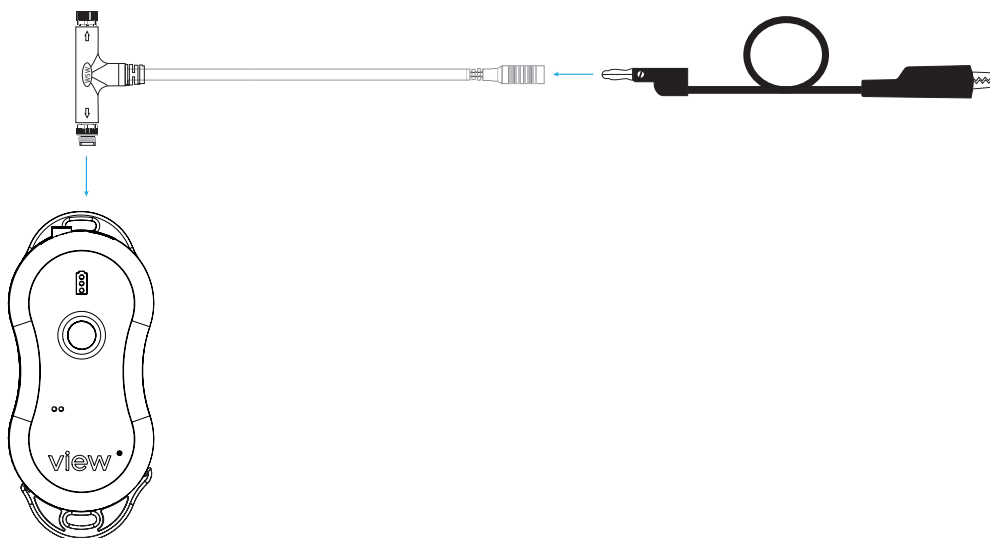
Grounding Connector
370-101516



Alligator Clip Cable
380-101558

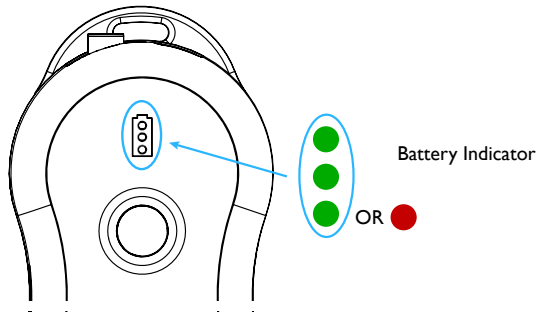
How to assemble:

Connect the Grounding Connector to the M8K connector on the top of the GTT. Connect the alligator clip cable to the side connector of the T.



Ensure battery is charged:

Turn on the GTT by holding down the center button for 3 seconds. The LED lights will turn on to indicate the device is on. Ensure there is available battery charge by checking the battery indicator as shown below. If the charge is low, charge the device using the included 12V DC Wall Charger. The GTT can take up to 8 hours for a full charge.



Testing:

STOP: The glass must be clear

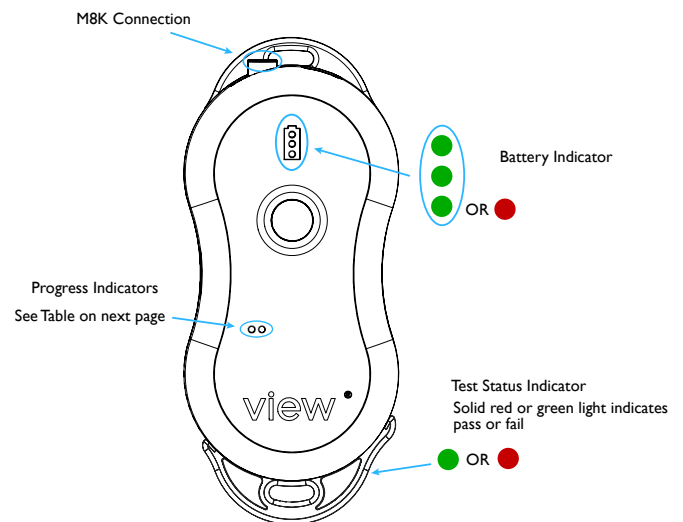
In order to have an accurate test result, the glass must be clear (free of charge). Please ensure that a shorting cap is on the IGU Smart Window Connector. If there is no shorting cap, please connect one and wait 15 minutes before testing. This must be done for all windows.

Step 1: Connect GTT to IGU Cable or Smart Window Connector

In order to test, attach M8K connection on the GTT to the IGU cable or Smart Window Connector to be tested.

Step 2: Attach the alligator clip to the window frame or bonded metal if testing field cabling

Attach the alligator clip to a grounded metal part (not anodized or painted) of the frame to create a common ground (without this, the system will be unable to test for ground shorts such as a screw going through cable or bare wire touching the frame). This is required for all testing where the cabling is inside the frame (not required for IGU receipt testing). If the frame does not have raw metal to connect, connect to a screw going into the frame. If there is a doubt whether there is continuity between the frame and the alligator clip, complete a continuity test between the alligator clip body and the frame to be connected using a digital multimeter.



Step 3: Ensure GTT is ready to test

The GTT can start testing once it reads the Smart Window Connector. This will be indicated by a slowly flashing green light on the test status indicator. This should take less than 5 seconds. If the indicator does not indicate the test is ready within 10 seconds, there is an issue with the cable and the test has failed.

Step 4: Start test

Once the GTT indicates it is ready to test, press the test button to begin testing. The test can take up to 30 seconds to be completed. The LED indicator on the bottom of the device will go either solid red or solid green to indicate either pass (green) or fail (red). Flashing lights indicate that the test is still underway.

The progress indicator lights indicate different states before, during and after testing. Consult the table below for troubleshooting of different LED configurations of the progress indicators.

Glazier Test Tool				
Condition	Left side	Right side	Large Base Light	Notes
			Bottom	
PowerUp	off	BLUE	Blinking Red	No IGU connected
Reading SWC	RED	BLUE	RED	Left LED becomes RED when attempting to read SWC
	RED	RED		Both LEDs become RED when SWC has been read
Ready for Test	off	BLUE	Blinking Green	Connected
Test Start	BLUE then GREEN	Blinking Blue	Blinking Green	Test in Progress
Ramp to Tint	BLUE	Blinking Green		
Hold at Tint	BLUE	GREEN		
Ramp to Clear	BLUE	Blinking Green		
Hold at Clear	BLUE	GREEN		
Test Complete	off	GREEN or RED	GREEN or RED	Indicating Pass or Fail
Test Cannot Start	off	off	Fast Blinking Red	e.g. Due to SWC read error if not connected

If the test is passed for the final onsite installation, apply a green TESTED label (as provided by View) to the IGU cable or Smart Window Connector and move on to the next test.

What types of failures does the GTT test for?

Cable Damage: Any cable damage will either lead to a failed completed test or failure to begin the test. If the GTT is fully connected and the test won't begin (flashing red light), this indicates either a damaged cable or missing IGU parameters. Depending on which wire in the cable is damaged, the test may do a full test and then fail or fail to start completely. Both should be considered failures.

Missing Smart Window Connector Parameters: If the IGU parameters are missing, the test will fail to start and show double blinking light on large indicator light as per chart above.

Non tinting IGU: If an IGU is completely unable to tint and hold charge (i.e. Busbar disconnected), the test will fail.

What types of failures does the GTT not test for?

Tinting Performance: The GTT does not tint the glass. Slow tinting IGU's are not tested as part of this test.

Visual Defects: The GTT does not tint the glass so visual defects will not be visible. Otherwise, working IGU's which have halos or other visual defects will pass the GTT test.

Frequently Asked Questions:

Q: The GTT is charging slowly. Is something wrong?

A: The GTT requires 8-10 hours for a full charge.

Q: How can I be sure the alligator clip is connected to the frame?

A: The best way to ensure a connection is to attach the clip to a raw (unpainted or anodized) part of the frame after installation; in most framing system this could be any part of the frame but for coated system like Hylar, the best alternative is a screw fastened into the framing system. The framing system does not need to be earth grounded but rather the GTT needs to be grounded to the framing system. If doubt exists, a multimeter can determine if the metal is grounded. In this case, with the grounding clip connected to the frame, one lead should touch the ground clip and one should touch a similarly coated part of the frame. If the continuity test passes, you are properly connected.

Q: I've received a high portion of failures in a particular area of the system. What's wrong?

A: Please contact your View Project Manager (PM) for assistance with troubleshooting.

Q: I need more GTT's. How can I order them?

A: Please reach out to your PM contact at View. The GTT can only be ordered as part of a complete kit.