

Flat Glass Inspection Criteria per ASTM C 1036 – 06 (abridged)¹

Terminology:

Crush - Lightly pitted condition with a dull gray appearance.

Dirt - Small particle of foreign matter embedded in the surface of flat glass.

Rub - Abrasion of a glass surface producing a frosted appearance.

Scratch - Damage on a glass surface in the form of a line caused by the movement of an object across and in contact with the glass surface.

Point Blemish - Crush, dirt, stones, gaseous inclusions, and other similar imperfections.

Linear Blemish - Scratches, rubs, and other similar imperfections.

Inspection:

Visual inspection should be done with the naked eye.

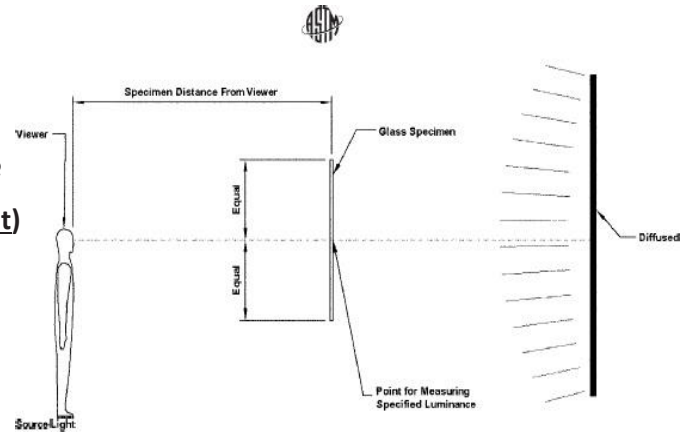
The inspector shall place the glass in a vertical position

Inspector shall view through the glass at an angle of 90°

Lighting should be daylight level (**without direct sunlight**)

or other uniform backlight that simulates daylight.

View at the distance specified by defect type.



Quality Criteria:

Allowable Point Blemish, (viewing distance 3'ft.)

Blemish size < 1/16" allowed without restriction.

Blemish size > 1/16" none allowed.

To determine point blemish size, measure height and width of blemish and average. Only the point blemish is to be measured, and not any distortion that may be present.

Allowable Linear Blemish, (viewing distance starting at 12'ft.)

Faint or light scratch < 3" allowed.

Medium or heavy scratch > 3" are not allowed.

To determine scratch intensity, start at 12'ft and move closer until scratch becomes visible, (refer to table).

Detection Distance	Blemish Intensity
Over 11'ft	Heavy
11'ft – 3'ft	Medium
3'ft – 8" in	Light
Less than 8" in	Faint

All listed criteria are based on ASTM C 1036 – 06, Quality Level 3.

¹ Information Provided by: Northwestern Industries, Inc. / Document Q-1001-001