

# Frameless Laminated Glass Guard (Deck / Porch)

## Code Reference Summary – For Information Only

This document is provided as a general reference to assist with planning. Final design, engineering, and code compliance must be reviewed and approved by the **local building official**.

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## Code Overview

### Guard Required

Per **International Residential Code (IRC) R312.1**:

- Required when surface is **>30" above grade**
- Minimum height: **36"**
- Openings must not allow a **4" sphere** to pass

### Load Requirements

Per IRC Table R301.5:

- Must resist **200 lb concentrated load** at top

### Glass Requirements

Per IRC R308.4:

- Glass must be **safety glazing** (tempered or laminated)
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## Frameless Glass – Code Path

Per IRC R308.4.4:

- Glass guards typically require a **top rail**

### Exception (allows frameless design):

- No top rail required when glass is:
  - **Laminated**
  - **Two or more plies**
  - **Equal thickness / same glass type**

👉 This is what allows **frameless laminated glass guardrails**

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## Typical Installation Approach (For Reference Only)

- Laminated glass panels attached to structural posts using **side-mounted clamps/brackets**
- Panels sized to meet **36" guard height**
- Typical glass thickness: **3/8"–1/2" laminated** (varies by design)
- A **~4" gap below the glass** is commonly used to:
  - Allow airflow
  - Make cleaning easier
  - Stay within code opening limits

👉 Example hardware type: [stainless steel glass clamp bracket \(side-mounted style\)](#)



👉 Hardware selection, spacing, and attachment must be designed and approved by others

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## Integration with Xtend Porch Windows

- Allows for **full-height Xtend Porch Windows above**
- Maintains fall protection while maximizing view and openness

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## Important Notes

The code does **not** define:

- Glass thickness

- Interlayer type
- Attachment method
- Post-breakage performance

These must be determined by:

- A **licensed engineer**, or
  - A **tested guard system supplier**
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## **Responsibility & Scope**

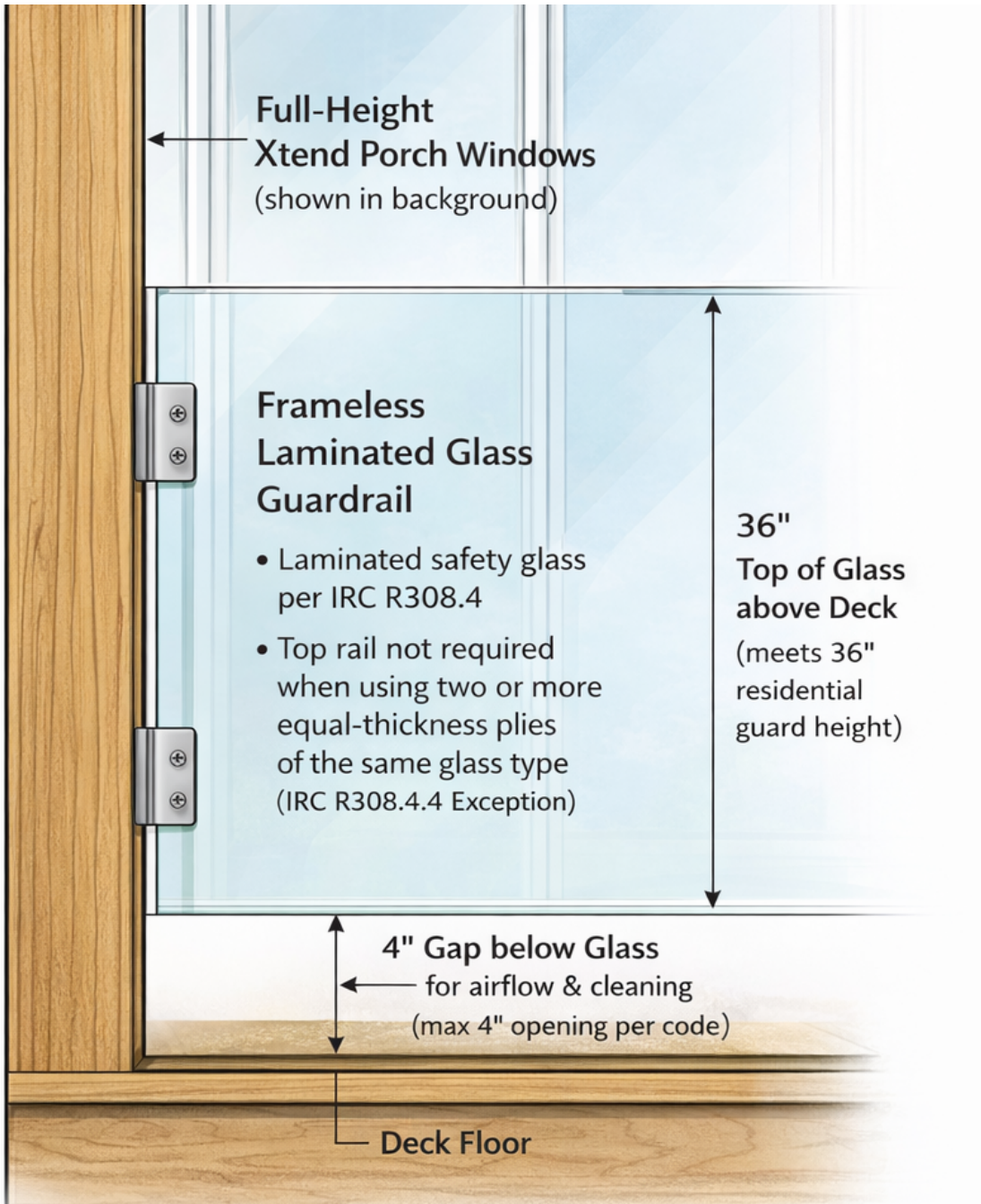
- Porch Windows Direct **does not supply frameless glass guard systems**
- Customers should work with a **local glass company**
- This document is **for informational use only**

Final responsibility for compliance rests with:

- The **local building official**
  - The **design professional / engineer of record**
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## **Closing**

Frameless laminated glass guards are a recognized code-compliant option when properly designed and approved. This approach is commonly used when customers want a clean, open view while still meeting fall protection requirements.



INSIDE VIEW