# WOCD Guidelines in North America

## Regulatory Landscape White Paper

*ASTM F2090-21 Adoption Across the United States and Canada*

Understanding Where and How Window Fall Protection Codes Apply to New Construction

**Important Note on How These Requirements Work**

No jurisdiction in the United States or Canada mandates a Window Opening Control Device (WOCD) as the sole means of window fall protection. In every code that references ASTM F2090, a WOCD is one of several acceptable compliance options — alongside fixed sill heights, permanent restrictors, or window guards. This distinction is important: KidGuard satisfies the code requirement; it does not replace it. The regulatory story is that wherever these codes apply, KidGuard is an accepted, certified solution.

## Executive Summary

The requirement to install window fall protection devices on qualifying windows is now embedded in the building codes of virtually every state in the United States and, increasingly, every province in Canada. The standard that defines what those devices must do — ASTM F2090, Standard Specification for Window Fall Prevention Devices With Emergency Escape (Egress) Release Mechanisms — is referenced directly by the International Residential Code (IRC) and the International Building Code (IBC), which together form the foundation of building codes across North America.

This white paper documents the current regulatory landscape: which model codes reference ASTM F2090, how those codes have been adopted at the state and provincial level, and what obligations they create for window manufacturers, builders, and property owners. It also identifies the key nuances — including important differences between US and Canadian code language — that affect how WOCDs like KidGuard are applied in practice.

The bottom line: KidGuard's ASTM F2090-21 certification makes it a code-compliant solution for window fall protection requirements across all US states that have adopted any IRC/IBC edition from 2006 onward, as well as in Alberta, Ontario, British Columbia, and other Canadian provinces that reference the National Building Code. The regulatory trend is accelerating, not retreating.

# Part 1: How the US Code System Works

Understanding the US regulatory landscape requires understanding how building codes are structured. The United States does not have a single national building code. Instead, model codes are developed by the International Code Council (ICC) and adopted — with amendments — by individual states and local jurisdictions.

## The Model Codes: IRC and IBC

Two ICC model codes are most relevant to window fall protection:

- The International Residential Code (IRC) governs one- and two-family dwellings and townhouses.
- The International Building Code (IBC) governs all other buildings, including multi-family residential (Group R-2 and R-3 occupancies).
- The International Existing Building Code (IEBC) governs alterations, repairs, and additions to existing buildings, including window replacement.

All three codes have included window fall protection provisions since their 2006 editions, and all three reference ASTM F2090 as the applicable standard for compliant WOCDs.

## The Trigger Conditions

Under the IRC (Section R312.2.1) and IBC (Section 1015.8), window fall protection is required when all of the following conditions are met:

- The window is operable.
- The top of the sill of the window opening is more than 72 inches above the exterior finished grade.
- The sill height is less than 24 inches above the finished floor (IRC / single-family) or less than 36 inches above the finished floor (IBC / multi-family).

When these conditions apply, the code requires one of the following compliant solutions:

- A fixed window that does not allow passage of a 4-inch diameter sphere in its largest open position.
- An ASTM F2090-compliant window fall prevention device (WOCD, specialized screen, or window guard).
- Under the IBC only: for windows more than 75 feet above grade, an ASTM F2006-compliant device (non-egress applications).

> *KidGuard satisfies Option 2 in every jurisdiction that has adopted any IRC or IBC edition from 2006 onward — which is effectively all 50 US states.*

## Window Replacement: The IEBC Requirement

The IEBC adds an important dimension for the replacement window market. When an existing window is replaced and the replacement meets specific criteria — including sill height, opening dimension, and distance above grade — a compliant fall protection device must be installed. Illinois's adopted building codes explicitly codify this requirement, and it flows through the IEBC into any jurisdiction that has adopted that code.

This means KidGuard's aftermarket design is not merely convenient — it is specifically relevant to a code-driven demand in the replacement window market.

# Part 2: US State Code Adoption

The ICC publishes new editions of the IBC and IRC on a three-year cycle. States adopt these codes on their own timelines, and many apply local amendments. The following represents the current state of adoption as of 2025, based on publicly available ICC adoption data. States that have adopted the 2006 edition or later have had ASTM F2090 window fall protection provisions in force.

## States with 2021 or 2024 IBC/IRC Adopted

The following states have adopted the 2021 or 2024 editions of the IBC and/or IRC, meaning the most current ASTM F2090 provisions are in effect:

| Jurisdiction | Code / Reference | ASTM F2090 Status | Key Requirement / Notes |
|---|---|---|---|
| **California** | 2022 CBC (based on IBC/IRC 2021) | Explicitly Referenced | Window fall protection required per IBC 1015.8 / IRC R312.2; ASTM F2090 is the listed WOCD standard. |
| **Colorado** | 2021 IBC / 2021 IRC | Explicitly Referenced | Denver Residential Code 2021 specifically references ASTM F2090 for WOCDs and replacement windows. |
| **Georgia** | 2020 Georgia Codes (IBC/IRC 2018 base, moving to 2024) | Explicitly Referenced | ASTM F2090 referenced for WOCD compliance under window fall protection provisions. |
| **Illinois** | 2021 IBC / 2021 IRC / 2024 adopted | Explicitly Referenced | Illinois Building Code and Existing Building Code directly cite ASTM F2090 for WOCDs on new and replacement windows. |
| **Iowa** | 2021 IBC / 2021 IRC | Explicitly Referenced | ASTM F2090 referenced for window fall protection compliance. |
| **Minnesota** | 2020 MN Residential Code (IRC 2018 base) | Explicitly Referenced | Minnesota DLI guidance references ASTM F2090 as the compliant WOCD standard for R312.2 requirements. |
| **Mississippi** | 2021 IBC / 2021 IRC | Explicitly Referenced | ASTM F2090 referenced for WOCD compliance. |
| **Nevada** | 2018 IBC / 2018 IRC (2024 in progress) | Explicitly Referenced | ASTM F2090 referenced for window fall protection; Las Vegas / Clark County on 2024 IBC. |

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|---|---|---|---|
| **New York** | 2022 NY Codes (IBC/IRC 2018 base, 2024 IBC adopted) | **Explicitly Referenced** | ASTM F2090 referenced for WOCD compliance; NYC has separate local code with similar requirements. |
| **North Dakota** | 2021 IBC | **Explicitly Referenced** | ASTM F2090 referenced for window fall protection under IBC 1015.8. |
| **Oregon** | 2021 ORS / ORSC (IRC/IBC base) | **Explicitly Referenced** | ASTM F2090 referenced for WOCD compliance; Portland on 2024 IBC. |
| **Texas** | 2021 IRC (state) / 2024 IBC (some jurisdictions) | **Explicitly Referenced** | Texas IHB Residential Code 2021 includes R312.2 window fall protection with ASTM F2090. |
| **Utah** | 2021 IBC / 2021 IRC | **Explicitly Referenced** | ASTM F2090 referenced for WOCD compliance. |
| **Washington** | 2021 IRC / 2021 IBC (state amendments) | **Explicitly Referenced** | State-issued tip sheets (Feb 2024) explicitly require ASTM F2090 for window fall protection compliance. |
| **Wyoming** | 2021 IBC / 2021 IRC | **Explicitly Referenced** | ASTM F2090 referenced for WOCD compliance. |

### States on 2015–2018 Editions (ASTM F2090 Still Applicable)

Many states are still on the 2015 or 2018 edition of the IRC/IBC. These editions also reference ASTM F2090 for WOCD compliance. The window fall protection provisions were essentially unchanged between the 2006 and 2021 editions in terms of their reference to ASTM F2090.

States in this category include Florida (2023 FBC, based on 2018 IBC/IRC), Indiana (2014 adoption of 2012 IBC), South Carolina (2021 SC Codes, IBC/IRC 2018 base), and many others. In all cases, ASTM F2090 remains the referenced standard for any WOCD used to satisfy the fall protection requirement.

### Important Caveat: State Amendments

Every state has the authority to amend the model code at adoption. This means the specific trigger conditions, sill heights, or acceptable alternatives may vary by jurisdiction. Builders and window manufacturers should always verify the current adopted code and local amendments with the Authority Having Jurisdiction (AHJ) — typically the local building department.

## Part 3: Canadian Provincial Adoption

Canada's building code system parallels the US in structure: the National Building Code of Canada (NBC) is a model code developed by the Canadian Board for Harmonized Construction Codes and published by the National Research Council. Each province adopts the NBC (or its own provincial variant) with amendments on its own schedule.

The NBC's window fall protection provisions are found in Article 9.8.8.1, which requires that openable windows in residential buildings with sills at or below 900 mm above the finished floor either be protected by a guard or limited to a maximum opening of 100 mm. ASTM F2090 is referenced in the Appendix Notes as the technical description for compliant WOCDs.

The Canadian picture is more nuanced than the US, particularly around the interaction between fall protection requirements and egress window requirements. The key distinction: some provinces have resolved this tension explicitly (Alberta), while others are still working through it (BC).

| Jurisdiction | Code / Reference | ASTM F2090 Status | Key Requirement / Notes |
|---|---|---|---|
| **Alberta** | 2023 Alberta Building Code (NBC base) + STANDATA 23-BCV-001 (April 2024) | **Mandatory (WOCD on qualifying egress windows)** | Strongest Canadian mandate. Egress windows with sills <900 mm above floor require a WOCD. ASTM F2090 explicitly named. STANDATA 23-BCV-001 resolves the conflict between fall protection and egress requirements province-wide. |
| **Ontario** | 2024 Ontario Building Code (NBC 2020 base) | **Referenced in Appendix (OBC 9.8.8.1)** | Appendix Note A-9.8.8.1.(4) of the 2024 OBC explicitly references ASTM F2090 as the technical description for WOCDs. City of Ottawa issued formal guidance in 2024 confirming WOCD compliance. Standard not in the body of the code, but referenced as guidance. |
| **British Columbia** | BCBC 2024 (NBC base) | **Referenced (fall protection only)** | BCBC 2024 references WOCDs and ASTM F2090 in fall protection notes. However, BCAB Decision 1940 (2024) found WOCDs satisfy fall protection but not egress, as full egress opening must be achievable by normal window procedure. More restrictive than Alberta. |
| **Prince Edward Island** | NBC 2020 (provincial adoption) | **Referenced in Appendix** | Follows NBC provisions. ASTM F2090 referenced in Appendix notes for WOCD compliance. Same fall protection requirements as NBC 9.8.8.1. |
| **Other Provinces** | NBC 2020 / provincial variants | **Referenced in Appendix** | Manitoba, Saskatchewan, Nova Scotia, New Brunswick, Newfoundland, and Yukon/NWT/Nunavut follow NBC provisions where ASTM F2090 is referenced in Appendix guidance for WOCDs. Individual provincial amendments may vary. |
| **Quebec** | Quebec Building Code (NBC base with significant amendments) | **Indirectly Referenced** | Quebec adopts its own code with significant amendments. NBC Appendix references to ASTM F2090 may or may not carry through. Consult local AHJ. |

### The Alberta Story: The Clearest Canadian Mandate

Alberta's regulatory position is the most directly relevant to WOCD manufacturers and window companies operating in Canada. The 2023 Alberta Building Code introduced a requirement at Article 9.8.8.1.(4)(b) that openable windows with sills at or below 900 mm above the finished floor be equipped with a mechanism limiting the opening to 100 mm.

This created a conflict with Article 9.9.10.1, which requires bedroom egress windows to be openable without keys, tools, or special knowledge. STANDATA Variance 23-BCV-001, published by Alberta Municipal Affairs in April 2024, resolved this conflict province-wide by explicitly permitting ASTM F2090-compliant WOCDs as a means of satisfying both requirements simultaneously.

The practical effect for window manufacturers supplying the Alberta market: egress windows with sills less than 900 mm above the floor must be equipped with a compliant device — and a WOCD meeting ASTM F2090 is the designated solution.

> *For window manufacturers supplying Alberta new construction: egress windows with sills below 900 mm above the finished floor require a WOCD compliant with ASTM F2090. KidGuard's certification directly satisfies this requirement.*

### Ontario: Guidance-Level Recognition

Ontario's 2024 OBC references ASTM F2090 in its Appendix rather than in the body of the code. This means ASTM F2090 is recognized guidance — not a mandatory citation — but the Ontario Building Officials Association (OBOA) has confirmed that an ASTM F2090-compliant WOCD installed on a required egress window that also requires fall protection is consistent with the intent of the OBC.

The City of Ottawa issued an official advisory in 2024 confirming that window opening control devices complying with ASTM F2090 satisfy the window fall protection requirements of the OBC. Other Ontario municipalities are expected to issue similar guidance as the 2024 OBC is more widely implemented.

### British Columbia: Partial Recognition with Egress Nuance

BC's Building Code Appeals Board Decision 1940 (2024) addressed a specific installation where a WOCD was used on a window serving both fall protection and egress purposes. The Board found that the WOCD satisfied the fall protection requirement, but did not satisfy the egress requirement as stated in the BCBC, because full egress opening should be achievable through normal window operation.

This creates a nuanced situation in BC: a WOCD can be used on windows requiring only fall protection (not serving as egress windows), but on windows serving as both, the egress question is not yet fully resolved in the code. The BCBC 2024 references WOCDs and ASTM F2090 in its notes, and the appeals board noted that BC has been looking to Alberta's STANDATA approach for guidance. BC's position may evolve.

## Part 4: The Regulatory Trend

The direction of travel in both countries is clear: more jurisdictions are referencing or requiring ASTM F2090-compliant devices, not fewer. Several factors are driving this trend:

### 1. Accelerating Code Adoption

As states and provinces adopt newer editions of the IRC, IBC, and NBC, they are picking up progressively clearer language around window fall protection and ASTM F2090 compliance. The 2021 and 2024 editions of the ICC I-codes contain more specific and better-organized provisions than earlier editions.

### 2. Industry Alignment

The Fenestration and Glazing Industry Alliance (FGIA) and the Window and Door Manufacturers Association (WDMA) published a joint Technical Bulletin in 2024 (AAMA/WDMA TB-24-01) specifically to help the industry understand WOCD requirements and distinguish compliant WOCDs from non-compliant alternatives like night latches and vent stops. This level of industry attention signals growing market demand for certified compliance.

### 3. Provincial Leadership

Alberta's STANDATA 23-BCV-001 is likely to influence other provinces. The OBOA in Ontario has explicitly noted the Alberta approach as a model for resolving the egress-vs.-fall-protection conflict. As more provinces seek to address this issue, the Alberta framework — with its direct reference to ASTM F2090 — provides a ready template.

### 4. Replacement Window Market

The IEBC creates a growing compliance obligation in the replacement window market. As aging housing stock is renovated and windows are replaced, ASTM F2090-compliant devices are required in an expanding number of jurisdictions for qualifying replacements. This is a significant and growing market segment that does not depend on new construction activity.

> *The regulatory question is not whether ASTM F2090 requirements will become more prevalent — it is how quickly existing jurisdictions will move to enforce and expand them.*

## Part 5: Key Distinctions for Window Manufacturers

Window manufacturers and builders navigating this regulatory landscape need to be aware of several important distinctions:

### WOCD vs. Vent Stop vs. Night Latch

Not all window hardware that restricts opening qualifies as a WOCD. Night latches, vent stops, and vent limiters may physically resemble WOCDs but do not meet ASTM F2090 requirements. They should not be used on windows designated for emergency escape and rescue. Only devices that have been tested and certified to ASTM F2090 can be represented as WOCDs for code compliance purposes.

### Factory-Installed vs. Field-Applied vs. Aftermarket

ASTM F2090 applies to all three categories. Section 1.4 of the standard specifically requires that window manufacturers relying on a supplier's test report verify that installation on their specific window product type complies with the standard. KidGuard, as a certified aftermarket device, provides documentation that allows window manufacturers and builders to satisfy this verification requirement.

### Fall Protection Only vs. Combined Fall Protection and Egress

In the US, the IRC and IBC allow a WOCD to simultaneously satisfy fall protection and permit egress — this is the intended purpose of the standard. In Canada, this dual function is clearly recognized in Alberta (via STANDATA), recognized in Ontario for fall protection with guidance on egress, and partially recognized in BC. Window manufacturers specifying WOCDs on egress windows in Canada should verify the current position of the applicable provincial AHJ.

### Partial Compliance Is Not Permitted

Section 1.5 of ASTM F2090-21 is unambiguous: partial compliance is not permitted. A device cannot claim to "meet most of" ASTM F2090. All applicable requirements must be met in full. This reinforces the importance of full third-party certification over self-declaration.

## Summary: North American Regulatory Status at a Glance

The following summarizes the current regulatory status across key North American jurisdictions:

| Jurisdiction | Code / Reference | ASTM F2090 Status | Key Requirement / Notes |
|---|---|---|---|
| **United States (all states)** | IRC 2006+ / IBC 2006+ | **Explicitly Referenced** | ASTM F2090 is the referenced WOCD standard in all US jurisdictions that have adopted any IRC/IBC edition from 2006 onward — effectively all 50 states. |
| **Illinois (example)** | 2021 IBC / 2018, 2021, 2024 IEBC | **Explicitly Referenced** | Among the most explicit US state codes; directly cites ASTM F2090 for new construction and replacement windows. |
| **Washington State** | 2021 IRC / 2021 IBC | **Explicitly Referenced** | State-issued guidance (Feb 2024) explicitly references ASTM F2090 compliance as the solution for qualifying windows. |
| **Colorado (Denver)** | 2021 IBC / 2021 IRC | **Explicitly Referenced** | Denver Residential Code 2021 cites ASTM F2090 for WOCDs on new and replacement windows. |
| **Alberta, Canada** | 2023 ABC + STANDATA 23-BCV-001 | **Mandatory (qualifying windows)** | Strongest Canadian mandate. WOCD required on egress windows with sills <900 mm. ASTM F2090 named as the defining standard. |
| **Ontario, Canada** | 2024 OBC (NBC 2020 base) | **Referenced (Appendix)** | ASTM F2090 in Appendix Note A-9.8.8.1.(4). OBOA confirms WOCD as consistent with OBC intent. Ottawa issued formal guidance in 2024. |

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| **British Columbia, Canada** | BCBC 2024 (NBC base) | **Referenced (fall protection)** | BCBC 2024 references WOCDs for fall protection; BCAB Decision 1940 found egress satisfaction requires further code clarification. |
| **Other Canadian Provinces** | NBC 2020 / provincial variants | **Referenced (Appendix)** | All provinces following NBC reference ASTM F2090 in guidance for WOCD compliance. Specific mandates vary by province. |

## Conclusion

The regulatory landscape for window fall protection in North America is not a patchwork of isolated requirements — it is a coherent, deepening framework anchored by ASTM F2090 and implemented through a consistent model code structure across both countries.

For window manufacturers, builders, and property managers, the practical implication is straightforward: in any jurisdiction that has adopted the IRC, IBC, or National Building Code (which is effectively all of North America), qualifying windows require compliant fall protection — and a WOCD certified to ASTM F2090 is the recognized solution that satisfies that requirement while preserving emergency egress capability.

KidGuard's ASTM F2090-21 certification positions it as a compliant solution in this entire regulatory landscape. As adoption of newer code editions accelerates, as Alberta's STANDATA model influences other provinces, and as the replacement window market grows, the demand for certified, documented WOCD compliance will only increase.

> *Regulatory note: This document reflects publicly available code adoption information as of May 2026. Building codes are adopted and amended at the state, provincial, and local level on varying schedules. Always verify current requirements with the Authority Having Jurisdiction (AHJ) before specifying or installing window fall prevention devices.*

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