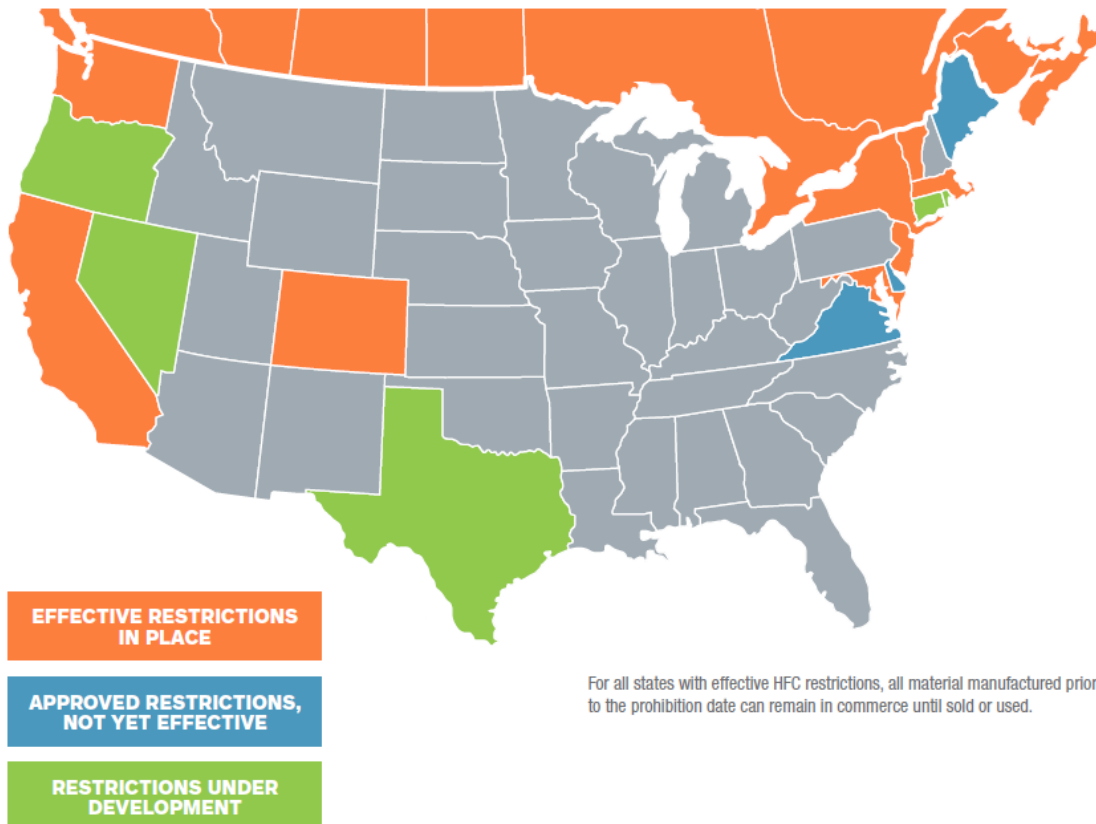


Recent Updates to State HFC Restrictions

The state-specific HFC phase-down map has changed slightly since the beginning of 2021.

- Maine and Virginia approved restrictions – effective January 1, 2022
- Delaware approved restrictions – effective September 1, 2021
- Maryland's restrictions went into effect July 1, 2021

This map summarizes the position of each state in the phase-down of HFCs as of July 1, 2021.



Why are states leading the transition?

The U.S. Environmental Protection Agency's Significant New Alternatives Policy (SNAP) program continually evaluates new and more environmentally responsible substitute products for use in several industrial sectors, including foam blowing agents. The introduction of commercially viable fourth-generation – hydrofluoroolefin (HFO) – foam blowing agents with low global warming potential (GWP) led to SNAP Rules 20 and 21, which prohibit the use of certain hydrofluorocarbon (HFC) blowing agents in spray polyurethane foam.

However, the U.S. Court of Appeals – D.C. Circuit partially vacated the SNAP rulings in 2019, preventing the establishment of a federal requirement to transition to low-GWP blowing agents in the SPF industry. Individual states are now leading the transition and many states have enacted SNAP-like legislation prohibiting the use of HFCs in the foam sector.

Even without a federal mandate, some states already enacted legislation to restrict the use of HFCs due to the availability of ultra-low global warming potential alternatives based on HFO technology like Carlisle Spray Foam Insulation's SealTite PRO One Zero. As the industry began formulating and installing products with HFO blowing agents, manufacturers and applicators quickly realized that HFO-based products often outperform HFC products in yield and jobsite productivity. HFO products can be installed at greater lift thicknesses and may eliminate the need to wait for foam to cool between passes, allowing applicators to achieve up to an R-38 in one application.

Besides sprayability, HFO products maintain or exceed the same physical, mechanical, and thermal insulation properties of HFC products. SealTite™ PRO One Zero was specifically formulated with an HFO blowing agent to be an identical equivalent to SealTite PRO Closed Cell. SealTite PRO One Zero can be specified interchangeably with SealTite PRO Closed Cell in all CSFI's NFPA 285 compliant wall designs and UL Listed fire-rated assemblies. SealTite PRO One Zero is available and can be included in specifications immediately in all states.

For the applicator switching from SealTite PRO Closed Cell to SealTite PRO One Zero in an HFC-free state, you may need to spray SealTite PRO One Zero 5-6°F hotter than the HFC-containing SealTite PRO Closed Cell to get the same reactivity profile. When dialing in SealTite PRO One Zero, targeting a ½- to 1-second brown time ensures an efficient use of foam.

A test spray dot onto the substrate where the chemical hits as a white foam indicates that the temperature settings may be too hot, which causes blowing agent to escape into the air and reduces expected yield. In this situation, decrease your temperature in 2-3°F increments until you achieve a consistent ½- to 1-second brown time.

If the chemical hits as a brown and runny liquid before turning into white foam, temperatures may be too cold. Increase your temperature in 2-3°F increments until you achieve a consistent ½- to 1-second brown time. Always consult the SealTite PRO One Zero Application Guide prior to installation or contact your CSFI Technical Service Representative.

Global warming potential (GWP) is the heat absorbed by any greenhouse gas in the atmosphere, as a multiple of the heat that would be absorbed by the same mass of carbon dioxide (CO₂). Blowing agent technology has evolved over the last few decades, greatly reducing environmental impact. Fourth-generation blowing agents based on HFO technology have reduced the GWP to be equivalent with CO₂.

BLOWING AGENT	GWP
CFC-12 (Freon 12)	10,900
HCFC-141b	725
HFC-365mfc	794
HFC-245fa	1,030
HFOs	1
CO ₂	1