

North American Market Trends

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Since the last time we all sat down in Tampere, Finland for Glass Performance Days, (GPD), the world and certainly the glass world has changed. Some changes are indelible, and others refined and perfected us. Coming out of the 2-year slowdown/shutdown, the North American glass industry is doing more with less, possibly more so than ever before as many companies are dealing with shortages of people and supplies. There were several industry consolidations, business closures and even some businesses declaring bankruptcy. However, the North American market isn't all gloom.

Production Capacity Impacts

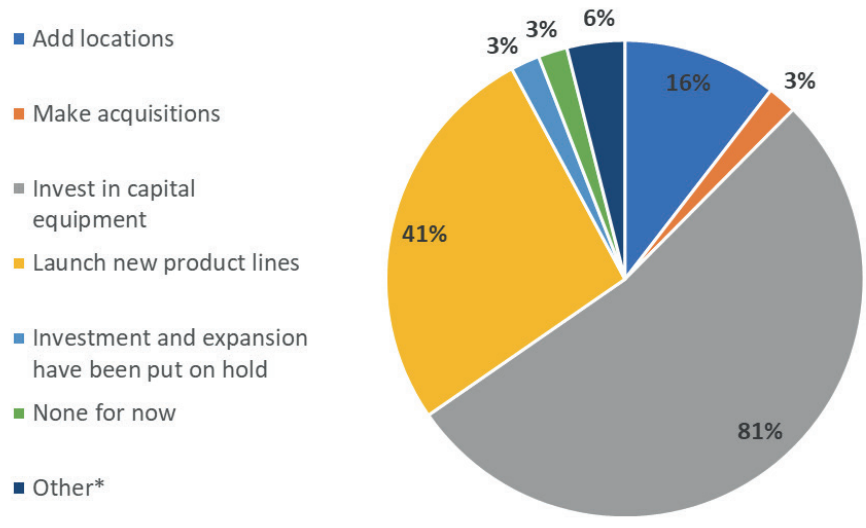
The global supply chain and logistics issues, in addition to shortages of raw materials, have 95% of the Glass Magazine's Top Fabricators sourcing their raw glass from North America. 41% of the top fabricators used the slowdown as an opportunity to expand their plant offerings and launched new product lines, while 81% invested in capital equipment. A majority, 68%, of responding fabricators said they automated some part of their manufacturing in 2021, and a significant majority, 79%, indicated they are using more software for plant optimization. The continued labor shortage was cited as the main reason for automation.

Fabrication Capacity Changes

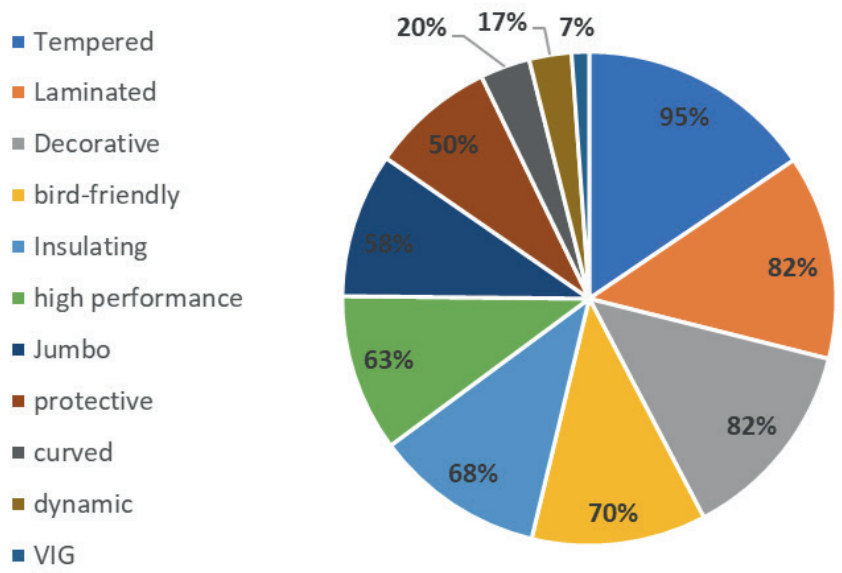
Those fabricators that expanded their offerings added more tempering, laminated and decorative processing lines. Those companies that launched new product lines seemed to focus on bird-friendly, high performance, protective glazing and vacuum insulating glass products.

Jumbo glass was a trend before the pandemic slowed us down and it continues to be a sought-after product. 58% of the top fabricators responded saying they fabricate jumbo glass products. This then begs the question of, what's jumbo glass? Survey respondents offered a wide range of that definition, from 84" (2.1m) to greater than 130" (3.3m).

2021 Added Capacity



2021 Glass Fabrication



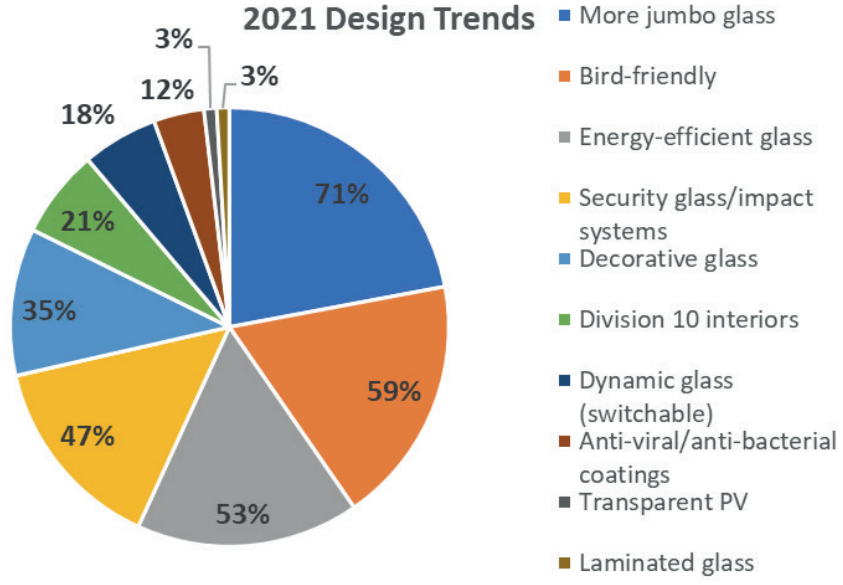
Current Glazing Trends

The 2021 design trends in North America look familiar to recent years. 71% respondents cite more specification requests incorporating jumbo glass and 59% including bird-friendly glazing. Energy-efficiency still high on the list with codes driving high-performance and better-suited glass design. Security systems comprise nearly 50% of design intent and decorative glass is still trending high at 35%. This year, anti-viral/anti-bacterial coatings made its debut at 12%.

Building Trends

More companies, and local and national governments are committing to carbon neutrality to address climate change. Manufacturers, suppliers, and architects alike are looking for solutions to decarbonize the built environment with increased energy efficiency and high-performance products. More jurisdictions are looking at embodied carbon and require disclosures on global warming potential. Another growing trend is that of daylighting and its impact on human physiology, comfort, and overall health. Recently, the University of California at Santa Barbara published a shortage of student housing; the proposed solution was the building of a windowless dormitory to house 4,600 students without a place to live. Billionaire Charlie Munger designed and funded this windowless structure that purported mounting flat screen TVs on the ceiling to create the illusion of daylighting. Licensed architect, author and daylighting expert Lisa Heschong summarized the issue best by saying, "It is important to recognize that windows don't have only one simple function. Rather, it is the complexity of their functions that makes them so essential. By offering reliable daylight illumination and views to the outdoors, windows provide the primary cues for our biological clocks, helping us stay healthy and in sync with the planet and other people around us".

It is very important to note the numerous ways glass as a material is the solution within the built environment. It is multi-functional and can be used for not just for weather protection, but provides safety, security, structural, acoustic control, privacy, ventilation, views to the outdoors, biophilia, daylighting, fade resistance, energy efficiency, thermal comfort, fire protection, egress, physiological and human health measures, and improves productivity. It is the only component of a building envelope that is both structural and functional. We spoke of trends in glazing above, but the greatest trend of all is the ability to see glass and windows as the solution to many



needs. Look beyond the basic punched opening and see the growth and potential of glass as part of our daily environment.

References

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