



[CLICK TO VIEW](#)

[Table of Contents 2](#)

[List of Tables & Charts 3](#)

[Study Overview 4](#)

[Sample Text, Table & Chart 5](#)

[Sample Profile, Table & Forecast 6](#)

[Order Form 7](#)

[About Freedonia, Custom Research, Related Studies, Corporate Use License 8](#)

# Windows & Doors

---

US Industry Study with Forecasts for **2012 & 2017**

---

Study #2406 | November 2008 | \$4800 | 461 pages

---

[www.freedoniagroup.com](http://www.freedoniagroup.com)



**The Freedonia Group**

767 Beta Drive

Cleveland, OH • 44143-2326 • USA

Toll Free US Tel: 800.927.5900 or +1 440.684.9600

Fax: +1 440.646.0484

E-mail: [info@freedoniagroup.com](mailto:info@freedoniagroup.com)

## Table of Contents

### EXECUTIVE SUMMARY

### MARKET ENVIRONMENT

|   |    |
|---|----|
| General .....                                   | 4  |
| Macroeconomic Environment.....                  | 5  |
| Demographic Trends .....                        | 9  |
| Personal Income & Expenditures.....             | 12 |
| Consumer Financing .....                        | 14 |
| Building Construction Trends .....              | 18 |
| Residential Building Construction .....         | 20 |
| Housing Completions .....                       | 23 |
| Housing Stock.....                              | 26 |
| Improvements & Repairs.....                     | 30 |
| Nonresidential Building Construction.....       | 31 |
| Office & Commercial Construction.....           | 33 |
| Institutional Construction.....                 | 34 |
| Industrial Construction.....                    | 34 |
| Other Nonresidential Building Construction..... | 35 |
| Nonresidential Improvements & Repairs .....     | 36 |
| Market Trends.....                              | 37 |
| Pricing .....                                   | 39 |
| Regulatory & Environmental Considerations.....  | 43 |
| Regulatory Considerations.....                  | 43 |
| Energy Efficiency Considerations .....          | 47 |
| Materials-Based Considerations.....             | 50 |
| Recycling.....                                  | 54 |
| Foreign Trade .....                             | 55 |
| Imports .....                                   | 57 |
| Exports.....                                    | 60 |
| World Window & Door Outlook.....                | 64 |

### OVERVIEW

|                                    |    |
|------------------------------------|----|
| General .....                      | 66 |
| Value Demand.....                  | 68 |
| Demand by Type & Market.....       | 73 |
| Doors .....                        | 75 |
| Windows .....                      | 77 |
| Accessories & Other Products ..... | 80 |
| Unit Demand.....                   | 81 |
| Prime Residential Windows .....    | 83 |
| Demand by Material .....           | 84 |
| Demand by Application .....        | 86 |
| Prime Residential Doors.....       | 89 |
| Interior Doors.....                | 91 |
| Entry Doors .....                  | 92 |
| Patio Doors .....                  | 94 |

### WOOD

|                                   |     |
|-----------------------------------|-----|
| General .....                     | 96  |
| Materials & Material Trends ..... | 101 |
| Products & Product Trends .....   | 102 |
| Wood Doors.....                   | 102 |
| Demand by Market.....             | 105 |
| Demand by Type.....               | 107 |
| Flush Doors .....                 | 108 |
| Panel Doors .....                 | 111 |
| Other Wood Doors.....             | 114 |

|                                      |     |
|--------------------------------------|-----|
| Wood Windows .....                   | 117 |
| Demand by Market.....                | 119 |
| Demand by Type.....                  | 121 |
| Double-Hung Windows.....             | 122 |
| Casement Windows .....               | 124 |
| Other Wood Windows .....             | 126 |
| Wood Window & Door Accessories ..... | 128 |
| Demand by Market.....                | 129 |
| Demand by Type.....                  | 131 |

### METAL

|  |     |
|--|-----|
| General .....                            | 133 |
| Materials & Material Trends .....        | 137 |
| Products & Product Trends .....          | 139 |
| Metal Doors & Frames .....               | 140 |
| Demand by Market.....                    | 141 |
| Demand by Type.....                      | 144 |
| Demand by Material.....                  | 148 |
| Metal Windows .....                      | 150 |
| Demand by Market.....                    | 152 |
| Demand by Type.....                      | 155 |
| Demand by Material.....                  | 158 |
| Other Metal Window & Door Products ..... | 160 |
| Demand by Market.....                    | 161 |
| Demand by Type.....                      | 163 |
| Demand by Material.....                  | 166 |

### PLASTIC

|   |     |
|---|-----|
| General .....                           | 168 |
| Materials & Material Trends .....       | 172 |
| Products & Product Trends .....         | 175 |
| Plastic Windows.....                    | 177 |
| Demand by Market.....                   | 179 |
| Demand by Type.....                     | 181 |
| Plastic Prime Windows.....              | 182 |
| Plastic Specialty & Storm Windows ..... | 184 |
| Demand by Material.....                 | 186 |
| Plastic Doors .....                     | 189 |
| Demand by Market.....                   | 190 |
| Demand by Type.....                     | 193 |
| Patio & Storm Doors .....               | 193 |
| Other Doors.....                        | 196 |
| Demand by Material.....                 | 198 |
| Plastic Window & Door Accessories ..... | 199 |
| Demand by Market.....                   | 200 |
| Demand by Type.....                     | 202 |
| Demand by Material.....                 | 203 |

### MARKETS

|                             |     |
|-----------------------------|-----|
| General .....               | 205 |
| Residential.....            | 208 |
| New Housing .....           | 213 |
| Demand by Material .....    | 216 |
| Demand by Product.....      | 218 |
| Improvements & Repairs..... | 219 |
| Demand by Material .....    | 221 |
| Demand by Product.....      | 223 |
| Demand by Housing Type..... | 224 |
| Single-Family.....          | 225 |
| Multifamily.....            | 228 |
| Manufactured Housing.....   | 230 |
| Nonresidential.....         | 233 |
| New Buildings .....         | 237 |
| Demand by Material .....    | 240 |
| Demand by Product.....      | 242 |

|                               |     |
|-------------------------------|-----|
| Improvements & Repairs.....   | 243 |
| Demand by Material .....      | 245 |
| Demand by Product.....        | 246 |
| Demand by Building Type ..... | 247 |
| Office & Commercial.....      | 249 |
| Institutional.....            | 251 |
| Industrial.....               | 253 |
| Other Nonresidential .....    | 255 |

### REGIONAL DEMAND

|   |     |
|---|-----|
| General .....                               | 258 |
| Regional Economic & Demographic Trends..... | 260 |
| Economic Outlook .....                      | 260 |
| Population Trends.....                      | 262 |
| Regional Construction Activity .....        | 264 |
| Housing Trends .....                        | 267 |
| Regional Window & Door Demand .....         | 270 |
| Northeast.....                              | 274 |
| New England.....                            | 276 |
| Middle Atlantic .....                       | 278 |
| Midwest.....                                | 279 |
| East North Central .....                    | 282 |
| West North Central.....                     | 283 |
| South.....                                  | 285 |
| South Atlantic .....                        | 288 |
| East South Central .....                    | 290 |
| West South Central .....                    | 292 |
| West .....                                  | 293 |
| Mountain .....                              | 296 |
| Pacific .....                               | 297 |

### INDUSTRY STRUCTURE

|  |     |
|--|-----|
| General .....                          | 300 |
| Industry Composition .....             | 301 |
| Market Share .....                     | 305 |
| Vertical & Horizontal Integration..... | 310 |
| Product Development.....               | 313 |
| Manufacturing .....                    | 314 |
| Marketing .....                        | 317 |
| Distribution .....                     | 321 |
| Mergers & Acquisitions.....            | 324 |
| Cooperative Agreements.....            | 327 |

### COMPANY PROFILES

|                                      |     |
|--------------------------------------|-----|
| Amarr Garage Doors.....              | 332 |
| Andersen Corporation .....           | 337 |
| ASSA ABLOY.....                      | 345 |
| Associated Materials.....            | 349 |
| Atrium Companies.....                | 355 |
| Champion Windows Manufacturing ..... | 359 |
| Drew Industries .....                | 361 |
| Elixir Industries .....              | 363 |
| Fortune Brands .....                 | 365 |
| Georgia Gulf.....                    | 373 |
| Griffon Corporation .....            | 376 |
| Harvey Industries.....               | 379 |
| Ingersoll-Rand Company.....          | 382 |
| Jancor Companies .....               | 385 |
| Jeld-Wen Incorporated.....           | 386 |
| JLL Partners .....                   | 392 |
| Kolbe & Kolbe Millwork .....         | 395 |
| Marvin Companies .....               | 398 |

(continued on next page)

[Click here to purchase online](#)

## Table of Contents

### COMPANY PROFILES

(continued from previous page)

|                                    |     |
|------------------------------------|-----|
| Masco Corporation.....             | 403 |
| Masonite International .....       | 406 |
| MI Windows and Doors.....          | 409 |
| Modern Builders Supply.....        | 413 |
| Monarch Holdings .....             | 415 |
| ODL Incorporated.....              | 418 |
| Pella Corporation .....            | 420 |
| Ply Gem Industries .....           | 424 |
| Saint-Gobain .....                 | 431 |
| Sanwa Holdings .....               | 434 |
| Stanley Works.....                 | 436 |
| Tomkins plc.....                   | 439 |
| TRACO Incorporated.....            | 441 |
| Ultraframe UK.....                 | 443 |
| VKR Holding A/S.....               | 445 |
| Wayne-Dalton Corporation .....     | 447 |
| Weather Shield Manufacturing ..... | 450 |
| Windsor Republic Doors.....        | 454 |
| Wolseley plc.....                  | 457 |
| Woodgrain Millwork.....            | 458 |

## List of Tables/Charts

### EXECUTIVE SUMMARY

|                      |   |
|----------------------|---|
| 1 Summary Table..... | 3 |
|----------------------|---|

### MARKET ENVIRONMENT

|   |    |
|---|----|
| 1 Macroeconomic Indicators .....                                      | 9  |
| 2 Population & Households.....  | 12 |
| 3 Personal Consumption Expenditures.....                              | 14 |
| 4 Consumer Financing Environment, 1997-2007 ..                        | 17 |
| 5 Building Construction Expenditures .....                            | 20 |
| 6 Residential Building<br>Construction Expenditures.....              | 22 |
| 7 Private Housing Completions.....                                    | 26 |
| 8 Housing Stock by Type .....   | 29 |
| Cht Year of Construction of Housing Stock, 2007....                   | 29 |
| 9 Residential Improvement<br>& Repair Expenditures .....              | 31 |
| 10 Nonresidential Building<br>Construction Expenditures.....          | 33 |
| 11 Nonresidential Building Improvement<br>& Repair Expenditures ..... | 37 |
| 12 Window & Door Market, 1997-2007 .....                              | 38 |
| Cht Window & Door Market, 1997-2007 .....                             | 39 |
| 13 Window & Door Pricing Environment.....                             | 42 |
| Cht Window & Door Pricing Patterns, 1997-2017 ....                    | 43 |
| 14 Window & Door Foreign Trade.....                                   | 57 |
| Cht US Window & Door Imports by Source, 2007 ....                     | 60 |
| Cht US Window & Door Exports<br>by Destination, 2007.....             | 63 |

### OVERVIEW

|  |    |
|--|----|
| 1 Window & Door Supply & Demand .....            | 72 |
| Cht Window & Door Demand by Material, 2007 ..... | 73 |

|  |    |
|--|----|
| 2 Window & Door Demand by Type & Market.....                         | 74 |
| 3 Door Demand by Material.....                                       | 77 |
| 4 Window Demand by Material.....                                     | 80 |
| 5 Accessory Demand by Material .....                                 | 81 |
| 6 Residential Window & Door Demand<br>by Product & Application ..... | 83 |
| 7 Prime Residential Window<br>Demand by Material .....               | 86 |
| 8 Prime Residential Window Demand<br>by Application & Material ..... | 89 |
| 9 Residential Door Demand by Type & Material....                     | 91 |

### WOOD

|   |     |
|---|-----|
| 1 Wood Window & Door Supply & Demand .....              | 100 |
| Cht Wood Window & Door Demand<br>by Product, 2007 ..... | 101 |
| 2 Wood Door Demand by Market .....                      | 107 |
| 3 Wood Door Demand by Type .....                        | 108 |
| 4 Flush Door Demand by Type .....                       | 111 |
| 5 Panel Door Demand by Type .....                       | 114 |
| 6 Other Wood Door Demand by Type.....                   | 116 |
| 7 Wood Window Demand by Market .....                    | 121 |
| 8 Wood Window Demand by Type .....                      | 122 |
| 9 Double-Hung Window Demand by Type.....                | 124 |
| 10 Casement Window Demand by Type.....                  | 126 |
| 11 Other Wood Window Demand .....                       | 128 |
| 12 Wood Accessory Demand by Market.....                 | 130 |
| 13 Wood Accessory Demand by Type .....                  | 132 |

### METAL

|   |     |
|---|-----|
| 1 Metal Window & Door Supply & Demand .....                         | 136 |
| Cht Metal Window & Door Demand<br>by Product, 2007 .....            | 137 |
| 2 Metal Door & Frame Demand by Market .....                         | 144 |
| 3 Metal Door & Frame Demand by Type .....                           | 147 |
| Cht Metal Door & Frame Demand by Type, 2007 ...                     | 148 |
| 4 Metal Door & Frame Demand by Material .....                       | 150 |
| Cht Metal Window Demand by Type, 2007 .....                         | 158 |
| 5 Metal Window Demand by Market .....                               | 155 |
| 6 Metal Window Demand by Type .....                                 | 157 |
| 7 Metal Window Demand by Material .....                             | 159 |
| 8 Other Metal Window & Door Product<br>Demand by Market .....       | 162 |
| 9 Other Metal Window & Door Product<br>Demand by Type .....         | 165 |
| Cht Other Metal Window & Door Product<br>Demand by Type, 2007 ..... | 165 |
| 10 Other Metal Window & Door Product<br>Demand by Material .....    | 167 |

### PLASTIC

|  |     |
|--|-----|
| 1 Plastic Window & Door Supply & Demand .....              | 171 |
| Cht Plastic Window & Door Demand<br>by Product, 2007 ..... | 172 |
| 2 Plastic Window Demand by Market.....                     | 181 |
| 3 Plastic Window Demand by Type .....                      | 182 |
| 4 Plastic Prime Window Demand by Type.....                 | 184 |
| 5 Plastic Specialty & Storm Window Demand ....             | 186 |
| 6 Plastic Window Demand by Material.....                   | 188 |
| 7 Plastic Door Demand by Market.....                       | 192 |
| 8 Plastic Door Demand by Type.....                         | 193 |
| 9 Plastic Patio & Storm Door Demand .....                  | 196 |
| 10 Plastic Door Demand by Material.....                    | 199 |
| 11 Plastic Accessory Demand by Market.....                 | 201 |

|  |     |
|--|-----|
| 12 Plastic Accessory Demand by Type.....     | 203 |
| 13 Plastic Accessory Demand by Material..... | 204 |

### MARKETS

|   |     |
|---|-----|
| 1 Window & Door Demand by Market .....  | 208 |
| 2 Residential Window & Door Demand<br>by Material & Product.....                          | 212 |
| Cht Residential Window & Door<br>Demand by Material, 2007.....                            | 213 |
| 3 New Residential Window & Door<br>Demand by Material & Product.....                      | 215 |
| Cht New Residential Window & Door<br>Demand by Material, 2007.....                        | 216 |
| 4 Residential Improvement & Repair Window<br>& Door Demand by Material & Product.....     | 221 |
| 5 Residential Window & Door<br>Demand by Housing Type .....                               | 225 |
| 6 Single-Family Housing Window & Door<br>Demand by Application.....                       | 228 |
| 7 Multifamily Housing Window & Door<br>Demand by Application.....                         | 230 |
| 8 Manufactured Housing Window & Door<br>Demand by Application.....                        | 233 |
| 9 Nonresidential Window & Door<br>Demand by Material & Product.....                       | 236 |
| Cht Nonresidential Window & Door<br>Demand by Material, 2007.....                         | 237 |
| 10 New Nonresidential Window & Door<br>Demand by Material & Product.....                  | 239 |
| Cht New Nonresidential Window & Door<br>Demand by Material, 2007.....                     | 240 |
| 11 Nonresidential Improvement & Repair Window<br>& Door Demand by Material & Product..... | 245 |
| 12 Nonresidential Window & Door<br>Demand by Building Type.....                           | 248 |
| Cht Nonresidential Window & Door<br>Demand by Building Type, 2007 .....                   | 249 |
| 13 Office & Commercial Window & Door<br>Demand by Application.....                        | 251 |
| 14 Institutional Window & Door<br>Demand by Application.....                              | 253 |
| 15 Industrial Window & Door<br>Demand by Application.....                                 | 255 |
| 16 Other Nonresidential Window & Door<br>Demand by Application.....                       | 257 |

### REGIONAL DEMAND

|   |     |
|---|-----|
| 1 Gross Domestic Product by Region.....         | 262 |
| 2 Population by Region.....                     | 264 |
| 3 Construction Expenditures by Region .....     | 267 |
| 4 Regional Housing Sales, New Units & Stock ... | 270 |
| 5 Window & Door Demand by Region.....           | 273 |
| Cht Window & Door Demand by Region, 2007 .....  | 273 |
| 6 Northeast Window & Door Demand .....          | 276 |
| 7 Midwest Window & Door Demand .....            | 282 |
| 8 South Window & Door Demand .....              | 288 |
| 9 West Window & Door Demand .....               | 296 |

### INDUSTRY STRUCTURE

|  |     |
|--|-----|
| 1 US Window & Door Sales by Company, 2007 ...            | 304 |
| Cht Window & Door Market Share<br>by Company, 2007 ..... | 307 |
| 2 Selected Acquisitions & Divestitures.....              | 326 |
| 3 Selected Cooperative Agreements.....                   | 329 |

[Click here to purchase online](#)

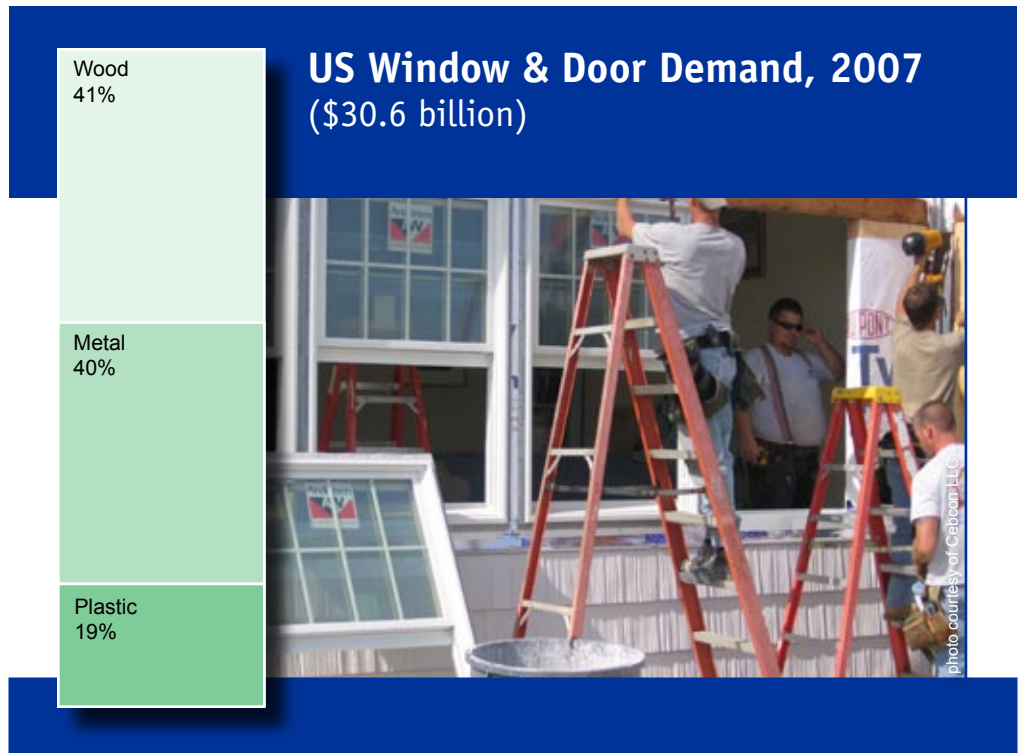
*Plastic windows and doors will benefit from their low cost compared to wood and metal products, as well as their resistance to rotting and corrosion, and enhanced energy efficiency.*

## US demand to rise 2.8% annually through 2012

US demand for windows and doors is forecast to rise 2.8 percent annually to \$40 billion in 2012, a deceleration from the 2002-2007 pace. Demand gains will be restrained by a subdued outlook for residential construction, which constitutes the largest market for windows and doors. Also restraining gains will be a slight decline in average floor space per new housing unit, which will mean the new homes will require fewer windows and doors. Spending on residential improvements is also expected to moderate through 2012, limiting advances in the improvement and repair segment of the residential market.

## Windows to outpace doors

Demand for windows is projected to advance 3.7 percent per year through 2012, due to increasing interest in energy efficiency. Consumers looking to reduce heating and cooling costs will replace older windows with more efficient models. Many of these windows feature cladding or internal insulation, increasing their price and thus promoting value gains. Metal windows will account for the most rapid gains in demand through 2012. Concerns about mitigating storm damage will lead many homeowners in coastal areas to install windows that offer protection against high winds and projectiles. Demand for doors will grow 2.4 percent per year through 2012. Plastic doors will account for the most



rapid gains in demand, as consumers opt for fiberglass entry doors and fiberglass or vinyl patio doors.

## Plastic windows and doors offer best opportunities

Overall, plastic is the window and door material expected to enjoy the best growth, with demand for plastic products projected to grow 4.9 percent per year to \$8.3 billion. Gains will be led by the low cost of plastic windows and doors compared to wood and metal products, as well as the increasing recognition of the superior properties of plastic windows and doors, such as durability, resistance to rotting and corrosion, and enhanced energy efficiency.

Wood windows and doors will continue to account for the largest share of overall window and door demand, totaling 41 percent in 2012. Through 2012, however, demand for wood products will advance at a below-average pace, primarily due to the high cost of wood products compared to less expensive plastic items. Wood products are increasingly seen as high-end products that increase the values of the structures in which they are installed. Wood windows and doors are predominantly used in residential construction applications, especially among middle-income and more affluent homeowners.

Copyright 2008 The Freedonia Group, Inc.

[Click here to purchase online](#)

## Sample Text, Table & Chart

### PLASTIC

#### Plastic Doors

The growing popularity of vinyl patio doors and fiberglass doors resulted in demand gains of 1.5 percent per year for doors between 1997-2007. Demand is forecast to advance 6.4 percent per year through 2017, led by vinyl patio and garage doors. Plastic doors are more durable and offer improved energy efficiency compared to metal doors.

**SAMPLE  
TEXT**

Demand for plastic doors will also be boosted by the rebound in the residential construction market. As housing completions pick up, so too will demand for plastic doors, as home builders order these doors for installation on new homes. Design trends will continue to drive demand for plastic doors. Many homeowners increasingly are enclosing porches, patios and sun rooms, and will either specify them in new homes or install them in their existing homes. These rooms are frequently accessed by patio doors. Value-conscious consumers may choose plastic doors over wood patio doors, while homeowners looking to reduce energy costs may opt for plastic doors over metal varieties.

Plastic doors are used predominantly in residential buildings, with lesser amounts used in light commercial applications. In the residential market, plastic doors face significant competition from metal doors, which dominate entrance and garage doors; and wood doors, which are the principal material used for interior doors and a strong competitor in many exterior door markets. Doors made from vinyl, fiberglass and other plastic materials are primarily able to garner market share from traditional wood and metal door materials based on their superior performance characteristics, such as low cost, enhanced energy efficiency, durability and minimal maintenance requirements.

189

Copyright 2008

TABLE VII-10

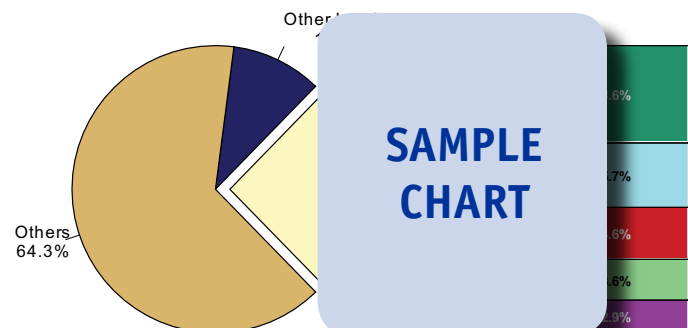
### NEW NONRESIDENTIAL WINDOW & DOOR DEMAND DEMAND BY MATERIAL & PRODUCT (million dollars)

| Item                               | 1997  | 2002  | 2007  | 2012  | 2017  |
|------------------------------------|-------|-------|-------|-------|-------|
| Nonres Bldg Constr Expend (bil \$) | 200.0 | 210.0 | 220.0 | 230.0 | 240.0 |
| \$ windows & doors/000\$ expend    | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   |
| New Nonres Window & Door Demand    | 3.0   | 3.15  | 3.3   | 3.45  | 3.6   |
| By Material:                       |       |       |       |       |       |
| Wood                               | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Metal                              | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Plastic                            | 1.0   | 1.15  | 1.3   | 1.45  | 1.6   |
| By Product:                        |       |       |       |       |       |
| Windows                            | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Doors                              | 1.0   | 1.15  | 1.3   | 1.45  | 1.6   |
| Accessories                        | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| % new                              | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  |
| Nonres Window & Door Demand        | 4.5   | 4.65  | 4.95  | 5.175 | 5.4   |

**SAMPLE  
TABLE**

CHART IX-1

### WINDOW & DOOR MARKET SHARE BY COMPANY, 2007 (\$34.9 billion)



**SAMPLE  
CHART**

## Sample Profile, Table & Forecast

**TABLE IV-1**  
**WOOD WINDOW & DOOR SUPPLY & DEMAND**  
(million dollars)

| Item                            | 1997 | 2002 | 2007 | 2012 | 2017 |
|---------------------------------|------|------|------|------|------|
| Res Bldg Constr Expend (bil \$) | 20   | 25   | 30   | 35   | 39.5 |
| \$ wood win & door/000\$ expend | 1.5  | 1.7  | 1.8  | 1.9  | 2.0  |
| Wood W&D Demand (mil 2000\$)    | 15   | 17   | 18   | 19   | 20   |
| price deflator (2000=100)       | 100  | 100  | 100  | 100  | 100  |
| Wood Window & Door Demand       | 15   | 17   | 18   | 19   | 20   |
| Doors                           | 10   | 11   | 12   | 13   | 14   |
| Windows                         | 5    | 6    | 6    | 6    | 6    |
| Accessories                     | 0    | 0    | 0    | 0    | 0    |
| - imports                       | 0    | 0    | 0    | 0    | 0    |
| + exports                       | 0    | 0    | 0    | 0    | 0    |
| Wood Window & Door Shipments    | 8    | 9    | 9    | 9    | 10   |



**COMPANY PROFILES**

**ODL Incorporated**  
 215 East Roosevelt Avenue  
 Zeeland, MI 49464  
 616-772-9111  
 http://www.odl.com

Annual Sales: \$1.2 billion  
 Employment: 1,200

Key Products: decorative windows, decorative door glass, tubular skylights, retractable screens, blinds and shades, accessories,

ODL is a leading manufacturer of wood window and door accessories, decorative door glass, traditional skylights, tubular skylights, retractable screens, blinds and shades. The Company is privately held.

The Company is active in the window and door industry through the production of decorative windows, decorative door glass, tubular skylights and entry treatments. ODL's decorative windows feature a high obscurity level, can be installed horizontally or vertically, and are available in five designs and a variety of sizes. Decorative door glass is comprised of a two-part frame and an insulated panel of tempered safety glass, and is available in 30 designs including Cirrus, Legacy Master, Cadence, Entropy, Avant, Escapades, Jacinto, Oak Park, Heirlooms, Bristol, Corvina, Tripoli, Majestic, Arcade and Quiet Elegance. The Company also makes ARCHITECTURAL ELEMENTS door glass, which features fluted mouldings and corner medallions; and VENTURA door glass, which features STRASS Swarovski crystals from D. Swarovski and Company (Austria). Frame options include ODL SMARTFRAME, SEVERE WEATHER and screw frames. ODL SMARTFRAME frames feature a snap design that does not require

418 Copyright 2008 The Freedonia Group, Inc.



“Demand for wood casement windows is expected to increase 3.3 percent annually to \$2.9 billion in 2012. Gains in demand will be led by increasing desire for energy-efficient windows. Casement windows, due to their larger size and ability to hold large glass panes, generally offer more opportunities for energy conservation compared to other window varieties.”

--Section IV, pg. 124



**OTHER STUDIES**

**World Insulation**

This study analyzes the global insulation industry. It presents historical demand data for the years 1997, 2002 and 2007 and forecasts for 2012 and 2017 by insulation material (e.g., foamed plastic, fiberglass, mineral wool), market (construction; industrial, HVAC and OEM), world region (e.g., North America, Asia/Pacific, Western Europe) and major national market. The study considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#2434 ..... 01/2009..... \$5800

**Builders' Hardware**

US builders' hardware demand will rise to \$11 billion in 2012, driven by a recovery in housing. Locks and other safety devices will remain the largest segment and grow the fastest, especially electromechanical types. Furniture will continue as the largest application while safety and protection products and cabinets lead gains. This study analyzes the US builders' hardware industry, with forecasts for 2012 and 2017 by material, product, application, market and region. It also evaluates market share and profiles industry players.

#2379 ..... 09/2008..... \$4600

**Siding**

Demand for siding materials in the US will exceed 115 million squares in 2012. Gains will derive largely from a recovery in residential construction, particularly in single-family housing. Demand in the key vinyl siding segment will be moderated by competition from fiber cement siding. Stucco and related materials will also outpace vinyl. This study analyzes the \$10.4 billion US siding industry, with forecasts for 2012 and 2017 by material, market and region. It also evaluates market share and profiles industry players.

#2376 ..... 07/2008..... \$4700

**Windows & Doors in China**

Demand for windows and doors (fenestration) in China will grow 11% annually through 2011. Gains will be driven by healthy growth in building construction, increased demand for larger living spaces, and further privatization of home ownership. Plastic fenestration will continue to supplant metal and wood types. This study analyzes the ¥115.6 billion Chinese fenestration industry, with forecasts for 2011 and 2016 by product, market and region. It also evaluates company market share and profiles major players.

#2258 ..... 11/2007..... \$4900

**World Windows & Doors**

Global window and door demand will rise 5% yearly through 2011. China, India, Mexico and Russia will see some of the largest sales increases. Wood and metal products will stay dominant while plastic types will grow the fastest. The nonresidential building market will outpace the larger residential sector. This study analyzes the \$117.5 billion world window and door industry, with forecasts for 2011 and 2016 by product, market, world region and for 30 countries. It also details market share and profiles major players.

#2235 ..... 09/2007..... \$5800

**About The Freedonia Group**

The Freedonia Group, Inc., is a leading international industry market research company that provides its clients with information and analysis needed to make informed strategic decisions for their businesses. Studies help clients identify business opportunities, develop strategies, make investment decisions and evaluate opportunities and threats. Freedonia research is designed to deliver unbiased views and reliable outlooks to assist clients in making the right decisions. Freedonia capitalizes on the resources of its proprietary in-house research team of experienced economists, professional analysts, industry researchers and editorial groups. Freedonia covers a diverse group of industries throughout the United States, the emerging China market, and other world markets. Industries analyzed by Freedonia include:

- Chemicals • Plastics • Life Sciences • Packaging • Building Materials • Security & Electronics • Industrial Components & Equipment • Automotive & Transportation Equipment • Household Goods • Energy/Power Equipment

[Click here to learn more about Freedonia](#)

**Freedonia Custom Research**

Freedonia Custom Research delivers the same high quality, thorough and unbiased assessment of an industry or market as an industry study. Since the research initiative is based upon a company's specific needs, companies harness Freedonia's research capabilities and resources to answer unique questions. When you leverage the results of a Freedonia Custom Research engagement, you are able to obtain important answers to specific questions and issues associated with: mergers and acquisitions, new product launches/development, geographic expansion, entry into new markets, strategic business planning, and investment and funding decisions.

Freedonia Custom Research is ideal for companies seeking to make a strategic difference in the status quo and focus on future business growth. Working side by side with clients, Freedonia's team is able to define a research project that is custom-tailored to answer specific questions and provide the basis from which a company can make informed business decisions.

[Click here to learn more about Custom Research](#)



[Click here for complete title list](#)



[Click here to visit freedoniagroup.com](http://www.freedoniagroup.com)