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[Table of Contents 2](#)

[List of Tables & Charts 3](#)

[Study Overview 4](#)

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

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

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Windows & Doors

US Industry Study with Forecasts to **2010 & 2015**

Study #2144 | January 2007 | \$4500 | 391 pages

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Table of Contents

EXECUTIVE SUMMARY

MARKET ENVIRONMENT

General	4
Macroeconomic Environment	5
Demographic Trends	8
Population	10
Households	12
Consumer Income & Spending Trends	12
Personal Income & Expenditures	13
Consumer Financing	15
Building Construction Trends	17
Residential Building Construction	21
Housing Completions	23
Housing Stock	26
Improvements & Repairs	27
Nonresidential Building Construction	28
Office & Commercial Construction	31
Institutional Construction	32
Industrial Construction	32
Other Nonresidential	
Building Construction	33
Nonresidential Improvements & Repairs	34
Market Trends	35
Pricing Trends	37
Regulatory & Environmental Considerations	41
Regulatory Considerations	41
Energy Efficiency Considerations	45
Materials-Based Considerations	47
Recycling	50
Foreign Trade	50
Imports	52
Exports	54
World Window & Door Outlook	57

OVERVIEW

General	60
Value Demand	63
Demand by Type & Market	66
Doors	67
Windows	69
Accessories & Other Products	71
Unit Demand	72
Prime Residential Windows	74
Prime Window Demand by Material	75
Prime Window Demand by Application	77
Prime Residential Doors	79
Passage Doors	81
Entry Doors	81
Patio Doors	83

WOOD WINDOWS & DOORS

General	85
Wood Doors	89
Flush Doors	92
Panel Doors	94
Other Wood Doors	97

Wood Windows	100
Double-Hung Windows	103
Casement Windows	106
Other Wood Windows	107
Wood Window & Door Accessories	109

METAL WINDOWS & DOORS

General	112
Metal Doors & Frames	116
Metal Door Types	119
Metal Door Materials	122
Metal Window Sashes & Frames	124
Metal Window Types	126
Metal Window Materials	128
Other Metal Window & Door Products	130
Other Metal Window & Door Product Types	131
Other Metal Window & Door	
Product Materials	133

PLASTIC WINDOWS & DOORS

General	135
Materials & Material Trends	138
Products & Product Trends	141
Plastic Windows	143
Prime Windows	146
Specialty & Storm Windows	149
Sashes, Frames & Other Products	151
Plastic Window Materials	152
Plastic Doors	154
Patio & Storm Doors	157
Other Doors	159
Plastic Door Materials	161

MARKETS

General	163
Residential	165
New Housing	169
Improvement & Repair	173
Demand by Housing Type	176
Single-Family	178
Multifamily	179
Manufactured Housing	181
Nonresidential	183
New Buildings	186
Improvement & Repair	189
Demand by Building Type	191
Office & Commercial	193
Institutional	195
Industrial	197
Other Nonresidential	199

REGIONS

General	201
Regional Economic & Demographic Trends	203
Economic Outlook	203
Population Trends	205
Regional Construction Activity	207
Housing Trends	209
Regional Window & Door Demand	211
Northeast	214
New England	217
Middle Atlantic	218

Midwest	219
East North Central	222
West North Central	223
South	225
South Atlantic	227
East South Central	229
West South Central	230
West	231
Mountain	234
Pacific	235

INDUSTRY STRUCTURE

General	238
Industry Composition	239
Market Share	244
Andersen	245
Jeld-Wen	246
Masonite	246
Pella	247
Other Leading Producers	247
Vertical & Horizontal Integration	248
Product Development	250
Wood & Metal Windows & Doors	251
Plastic Windows & Doors	252
Other Product Developments	253
Manufacturing	255
Marketing	257
Distribution	260
Mergers & Acquisitions	263
Cooperative Agreements	267

COMPANY PROFILES

Amarr Garage Doors	272
Andersen Corporation	275
ASSA ABLLOY	282
Associated Materials	285
Atrium Companies	287
Champion Window Manufacturing	292
Drew Industries	294
Elixir Industries	296
Fortune Brands	298
Georgia Gulf	303
Griffon Corporation	306
Harvey Industries	309
Ingersoll-Rand Company	312
Jancor Companies	314
Jeld-Wen Incorporated	316
JLL Partners Incorporated	323
Kolbe & Kolbe Millwork	326
Linsalata Capital Partners	328
Marvin Companies	329
Masco Corporation	333
Masonite International	336
MI Windows and Doors	340
Modern Builders Supply	343
Monarch Holdings	345
ODL Incorporated	349
Pella Corporation	351
Ply Gem Industries	355
Saint-Gobain	361
Sanwa Shutter	364
Stanley Works	367

(continued on following page)

Table of Contents

COMPANY PROFILES

(continued from previous page)

Tomkins plc.....	370
TRACO Incorporated	372
Ultraframe plc	374
VKR Holding A/S.....	376
Wayne-Dalton Corporation	378
Weather Shield Manufacturing	380
Windsor Republic Doors.....	384
Wolseley plc.....	386
Woodgrain Millwork	388
Additional Companies Mentioned in Study.....	391

List of Tables/Charts

EXECUTIVE SUMMARY

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

MARKET ENVIRONMENT

1 Macroeconomic Indicators	8
2 Demographic Indicators	9
3 Personal Income & Expenditures	14
4 Consumer Financing Environment, 1995-2005.....	17
5 Building Construction Expenditures	20
6 Residential Building Construction Expenditures	23
7 Housing Indicators	26
Cht Year of Construction of Housing Stock, 2005	27
8 Residential Improvement & Repair Expenditures	28
9 Nonresidential Building Expenditures.....	31
10 Nonresidential Improvements & Repairs ...	34
11 Window & Door Market, 1995-2005	36
Cht Window & Door Market, 1996-2005	37
12 Window & Door Pricing Environment.....	40
Cht Window & Door Pricing Patterns, 1995-2015.....	41
13 Foreign Trade in Windows & Doors	52
Cht US Window & Door Imports by Source, 2005.....	54
Cht US Window & Door Exports by Destination, 2005.....	57

OVERVIEW

1 Window & Door Supply & Demand by Material	65
Cht Window & Door Demand by Material, 2005.....	66
2 Window & Door Demand by Type & Market	67
3 Door Demand by Material.....	69
4 Window Demand by Material	71

5 Window & Door Accessories Demand.....	72
6 Residential Window & Door Demand by Type & Application	74
7 Prime Residential Window Demand by Material.....	76
8 Prime Residential Window Demand by Application	79
9 Residential Door Demand by Type & Material	80

WOOD WINDOWS & DOORS

1 Wood Window & Door Supply & Demand by Product.....	88
Cht Wood Window & Door Demand by Product, 2005	89
2 Wood Door Demand	92
3 Wood Flush Door Demand	94
4 Wood Panel Door Demand	97
5 Other Wood Door Demand	100
6 Wood Window Demand	103
7 Wood Double-Hung Window Demand.....	105
8 Wood Casement Window Demand	107
9 Other Wood Window Demand.....	109
10 Wood Window & Door Accessories Demand	111

METAL WINDOWS & DOORS

1 Metal Window & Door Supply & Demand.	115
Cht Metal Window & Door Demand, 2005	116
2 Metal Door & Frame Demand by Type	119
Cht Metal Door & Frame Demand by Type, 2005.....	122
3 Metal Door & Frame Demand by Material	124
4 Metal Window Sash & Frame Demand by Type	126
Cht Metal Window Sash & Frame Demand by Type, 2005.....	128
5 Metal Window Sash & Frame Demand by Material.....	129
6 Other Metal Window & Door Product Demand by Type	131
Cht Other Metal Window & Door Product Demand by Type, 2005.....	133
7 Other Metal Window & Door Product Demand by Material.....	134

PLASTIC WINDOWS & DOORS

1 Plastic Window & Door Supply & Demand	137
2 Plastic Window Demand by Type	145
Cht Plastic Window Demand by Type, 2005..	146
3 Prime Plastic Window Demand	149
4 Plastic Specialty & Storm Window Demand	151
5 Plastic Window Demand by Material.....	154
6 Plastic Door Demand by Type	156
7 Plastic Patio & Storm Door Demand.....	159
8 Plastic Door Demand by Material.....	162

MARKETS

1 Window & Door Markets.....	165
2 Residential Window & Door Demand	168

Cht Residential Window & Door Demand by Material, 2005.....	169
3 New Residential Window & Door Demand	172
Cht New Residential Window & Door Demand by Material, 2005.....	172
4 Residential Improvement & Repair Window & Door Demand.....	176
5 Residential Window & Door Demand by Housing Type	177
6 Single-Family Housing Window & Door Demand	179
7 Multifamily Housing Window & Door Demand	181
8 Manufactured Housing Window & Door Demand	183
9 Nonresidential Window & Door Demand by Material.....	185
Cht Nonresidential Window & Door Demand by Material, 2005.....	186
10 New Nonresidential Window & Door Demand	188
Cht New Nonresidential Window & Door Demand by Material, 2005.....	188
11 Nonresidential Improvement & Repair Window & Door Demand.....	191
12 Nonresidential Window & Door Demand by Building Type.....	192
Cht Nonresidential Window & Door Demand by Building Type, 2005	193
13 Office & Commercial Building Demand for Windows & Doors	195
14 Institutional Building Demand for Windows & Doors	197
15 Industrial Building Demand for Windows & Doors	199
16 Other Nonresidential Building Demand for Windows & Doors	200

REGIONS

1 Regional Gross Domestic Product	205
2 Population by Region.....	207
3 Regional Construction Expenditures.....	209
4 Regional Housing Indicators	211
5 Window & Door Demand by Region.....	213
Cht Window & Door Demand by Region, 2005	213
6 Northeast Window & Door Demand by Subregion & Market.....	216
7 Midwest Window & Door Demand by Subregion & Market.....	222
8 South Window & Door Demand by Subregion & Market.....	227
9 West Window & Door Demand by Subregion & Market.....	234

INDUSTRY STRUCTURE

1 Window & Door Sales by Company, 2005	242
Cht Window & Door Market Share by Company, 2005.....	245
2 Selected Acquisitions & Divestitures.....	265
3 Selected Cooperative Agreements.....	270

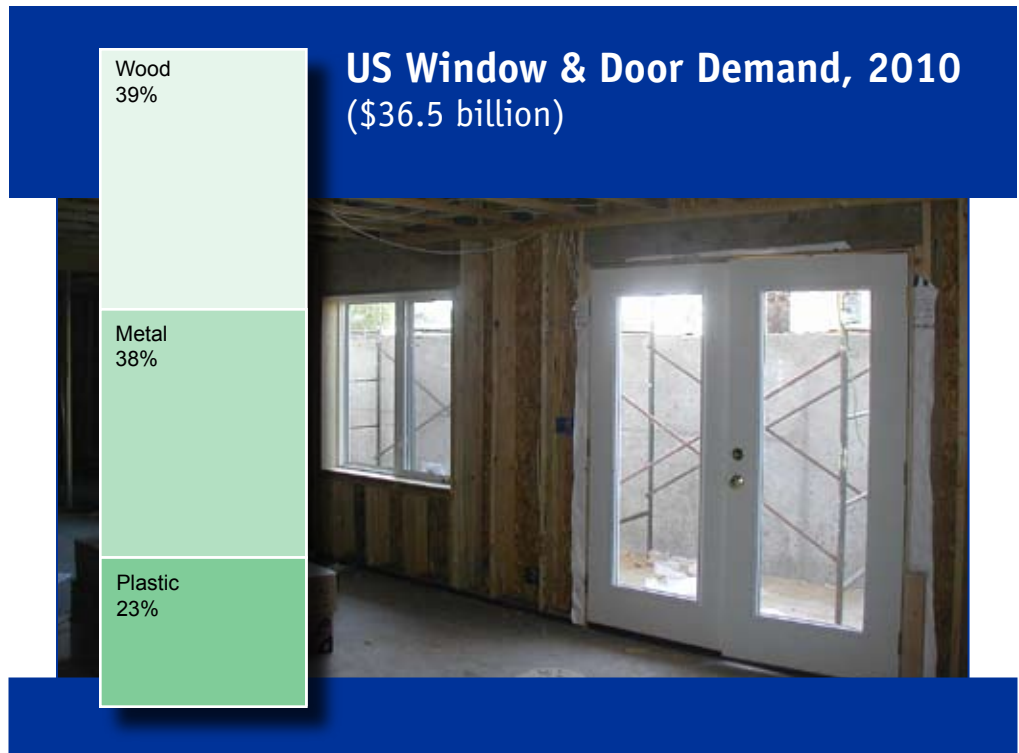
Plastic materials (e.g., vinyl, fiberglass, and wood-plastic composites) will continue to make inroads on both wood and metal products, with demand increasing 6.5 percent annually through 2010.

Plastic to continue gains on wood, metal products

US window and door demand is projected to increase 3.3 percent annually through 2010 to \$36.5 billion, a deceleration from the 2000-2005 period due to a sharp drop in single-family housing completions. Plastic windows and doors will continue to make inroads as a replacement for both wood and metal products, with demand increasing 6.5 percent annually. Plastic materials (e.g., vinyl, fiberglass, and wood-plastic composites) have primarily rivaled wood products in the residential market, due to their advantages in terms of high energy efficiency, low maintenance requirements and relatively low costs. Plastic's share of total value demand has risen from 15 percent in 2000 to 20 percent in 2005 and is expected to reach 23 percent by 2010. This share is even higher when measured in units due to the lower cost of these products.

Residential market to remain dominant

The residential market accounted for over three-quarters of window and door demand in 2005. This is not only due to the size of the residential construction industry, but also because this market tends to place a higher value on aesthetics and energy efficiency, which leads to the use of higher-cost products, such as wood windows and doors. Furthermore, several trends in housing characteristics continue to support growth in window



and door demand per residential structure, including increases in the number of windows per home and the growing popularity of patios and decks. The large stock of existing homes also provides a base for improvement and repair purchases of window and door products. In fact, while the new residential market for windows and doors will decline through 2010, the improvement and repair market will grow 6.0 percent annually.

Nonresidential market to grow the fastest

Demand for windows and doors in the nonresidential building market is expected to advance 8.0 percent per year through 2010 to nearly \$11 billion, com-

prising 30 percent of total window and door demand. Growth will be off a low 2005 base and will result from an upturn in nonresidential building construction. In comparison to residential markets, nonresidential markets often place higher demands on window and door products, with industrial buildings calling for heavy-duty products, and office, commercial and institutional structures requiring products able to withstand high levels of wear and tear. As a result, metal is the dominant material used for nonresidential windows and doors, and annual growth of more than eight percent through 2010 in nonresidential applications will lead to metals accounting for a slightly larger share of the total window and door market.

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Sample Profile, Table & Forecast

TABLE V-2
METAL DOOR & FRAME DEMAND BY TYPE
(million dollars)

Item	1995	2000	2005	2010	2015
Building Construction Expend (bil \$)	451	686	975	1208	1564
\$ metal door & frame/\$000 constr	9.9	8.4	6.9	6.6	6.7
Metal Door & Frame Demand	4,500	5,766	6,731	7,968	10,464
Swing Doors	1,500	1,900	2,200	2,600	3,300
Residential Garage Doors	1,000	1,200	1,400	1,600	2,000
Overhead Doors	1,000	1,200	1,400	1,600	2,000
Residential Entrance Doors	1,000	1,200	1,400	1,600	2,000
Sliding Doors	1,000	1,200	1,400	1,600	2,000
Door Frames	1,000	1,200	1,400	1,600	2,000
Other Doors	1,000	1,200	1,400	1,600	2,000
% metal	70	70	70	70	70
Metal Window & Door Demand	7,000	8,400	9,800	11,600	15,200

COMPANY PROFILES

Champion Window Manufacturing Incorporated

12121 Champion Way
 Cincinnati, OH
 513-346-4600
<http://www.championwindow.com>

Annual Sales: \$1.2 billion (2006)
 Employment: 1,000

Key Products: vinyl replacement windows; stainless steel and aluminum patio doors;

Champion Window Manufacturing is a privately held manufacturer, distributor, wholesaler and installer of building products, including vinyl replacement windows, vinyl and steel patio doors, fiberglass and stainless steel entry doors, siding, and patio rooms. These products are sold under the CHAMPION tradename. In January 2006, US-based Equus II Incorporated sold Champion Window Manufacturing to a private investor group led by New York-based Kenner Equities IV LP in a transaction valued at approximately \$98 million.

The Company's CHAMPION vinyl replacement windows feature COMFORT 365 GLASS, which is double-pane insulated glass that provides energy efficiency and protection from ultraviolet rays. Champion introduced COMFORT 365 GLASS in 2005. These vinyl replacement windows are designed with foam-filled insulated vinyl frames, tilt-in sashes, dual self-storing ventilation latches, cam-style locks and heavy-duty wool pile weatherstripping. Decorative grids are also available in colonial, diamond and French styles. CHAMPION windows are produced with a lifetime guarantee, and are available in such models as bay, bow, casement, cottage, double-hung, picture, sliding and garden.

**SAMPLE
PROFILE**

**SAMPLE
TABLE**

"Demand for wood doors is projected to advance 1.7 percent annually through 2010 to \$8.1 billion, making wood doors the fastest growing wood window and door product segment. The more favorable outlook for wood doors vis-a-vis wood windows or accessories primarily results from the ..."

--Section IV, pg. 89

Sample Text, Table & Chart

PLASTIC WINDOWS & DOORS

Plastic Windows

Demand for windows made from plastic materials is for billion. Gains will with of the 1995-2 and the projected d plastic window dem he projected for wood w equal gains for metal windows. Plastic windows will continue their share of the overall window market, offering lower price durability than wood units, and better aesthetics and energy e than metal products.

Windows made of vinyl, fiberglass and wood-plastic composites are typically available in the same types as can be produced using wood. The product segment is dominated by prime windows made from vinyl extrusions, most of which have a multi-chambered construction for high energy efficiency. Most vinyl window compounds are 80 percent PVC resin and 20 percent additives, and it is these additives that largely determine the physical properties of the material. For example, modern compounds usually contain modifiers used to improve toughness and flexibility, and ultraviolet stabilizers for resistance to sunlight. Vinyl windows are also often reinforced with steel, aluminum or other stiffeners in order to impart increased strength. Windows made from vinyl are typically lower priced than wood windows and offer such favorable performance characteristics as high durability, low maintenance requirements and high energy efficiency.

Vinyl windows are primarily used in residential applications, with particularly high market penetration in replacement markets. The popularity of vinyl windows in the residential aftermarket largely derives from their low maintenance requirements and high energy efficiency, as these factors are particularly important to homeowners looking to replace

143

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TABLE VIII-6

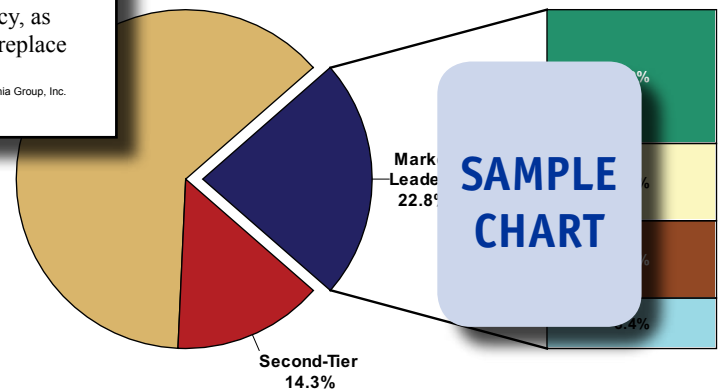
NORTHEAST WINDOW & DOOR DEMAND
BY SUBREGION & MARKET
(million dollars)

Item	1995	2000	2005	2010	2015
Northeast Construct Expend (bil \$)	160	200	250	300	350
\$ windows & doors/000\$ constr	1.0	1.2	1.5	1.8	2.0
Northeast Window & Door Demand	170	230	300	380	450
By Subregion:					
New England	100	130	170	210	250
Middle Atlantic	70	100	130	170	200
By Market:					
Residential	150	200	260	330	400
Nonresidential	20	30	40	50	50
% Northeast	10.0	11.5	12.0	12.7	13.0
Total Window & Door Demand	1700	2300	3000	3800	4500

SAMPLE TABLE

TABLE IX-1

WINDOW & DOOR MARKET SHARE BY COMPANY, 2005
(\$31.0 billion)



SAMPLE CHART

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OTHER STUDIES

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

Construction Outlook in China

Construction expenditures in China will rise 8.8% annually through 2011. Nonbuilding construction will lead gains, followed closely by the nonresidential and residential sectors. An expanding domestic economy, ongoing infrastructure upgrades and sustained foreign investment will be among the growth factors. This study analyzes the outlook for construction in China, with forecasts for 2011 and 2016 by market, application and region. The study also evaluates market share and profiles major contractors.
 #2193 05/2007..... \$4900

World Siding (Cladding)

Global demand for exterior siding (or cladding) will grow 3.8% yearly through 2010 based on a pickup in nonresidential building construction. Metal, concrete and stone, and fiber cement siding will grow the fastest. China, India and Russia will lead gains, while growth rates in developed countries will be slower. This study analyzes the 4.3 billion square meter world siding industry to 2010 and 2015 by product, market, world region and for 31 countries. It also evaluates market share and profiles major producers.
 #2159 02/2007..... \$5500

PVC in China

China leads the world in both production and consumption of polyvinyl chloride (PVC), and demand will rise 8% annually through 2010. Extruded PVC will gain market share. Construction will remain the largest application while packaging uses will surpass the consumer and institutional segment to become the second largest PVC market. This study analyzes the ¥44.5 billion Chinese PVC industry to 2010 and 2015 by product, market and region. It also profiles major players and evaluates company market share.
 #2131 12/2006..... \$4900

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