

[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](#)



Gypsum Products in North America

Industry Study with Forecasts for **2011 & 2016**

Study #2225 | August 2007 | \$4500 | 257 pages



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

www.freedoniagroup.com

Table of Contents

EXECUTIVE SUMMARY

MARKET ENVIRONMENT

General	4
Demographic & Household Trends	5
Macroeconomic Overview	6
United States	9
Canada	11
Mexico	12
Construction Trends	14
Residential Building Construction	16
Housing Starts	18
Improvement & Repair Expenditures	21
Nonresidential Building Construction	22
Nonbuilding Construction	24
Cement Outlook	25
United States	27
Canada	29
Mexico	30
Agricultural Overview	31
United States	33
Canada	34
Mexico	35
Historical Market Trends	36
Pricing Trends	39
Crude Gypsum	41
Gypsum Board	42
Environmental Considerations	45
Gypsum Mining & Manufacturing Operations	46
Waste Gypsum Disposal & Recycling	47
Synthetic Gypsum	49
International Environment	50
Mined Gypsum	51
Europe	54
Asia/Pacific	54
Latin America	54
Africa/Mideast	54
Wallboard & Plaster Demand	55
Europe	55
Asia/Pacific	56
Latin America	57
Africa/Mideast	57

GYPSUM SUPPLY & DEMAND

General	59
Mine Production	61
Synthetic Gypsum Demand	63
United States	69
General	69
Mine Production	71
Synthetic Gypsum Demand	72

Canada	73
General	73
Mine Production	75
Synthetic Gypsum Demand	76
Mexico	77
General	77
Mine Production	78

GYPSUM PRODUCT OVERVIEW

General	81
Calcined Gypsum	82
Uncalcined Gypsum	83
Product Outlook	85
Regional Outlook	86

CALCINED GYPSUM PRODUCTS

General	89
Gypsum Board	92
Manufacturing Process	95
Demand by Country	96
Demand by Type	98
Regular Gypsum Board	102
Type X Gypsum Board	105
Water-Resistant Gypsum Board	109
Sheathing Gypsum Board	112
Veneer Gypsum Board	114
Mobile Home Gypsum Board	117
Ceiling Tile	119
Prefinished & Other Gypsum Board	121
Demand by Market	124
Residential Construction	125
New	127
Improvement & Repair	128
Nonresidential Construction	128
New	130
Improvement & Repair	131
Other Markets	132
Building Plasters	133
Industrial Plasters	136

UNCALCINED GYPSUM PRODUCTS

General	141
Cement Additive	144
Agricultural Gypsum	146
Fillers & Other	149

MARKETS

General	152
Construction	154
Residential	158

New Residential	161
Residential Improvement & Repair	163
Nonresidential	165
New Nonresidential	167
Nonresidential Improvement & Repair	169
Nonbuilding	171
Industrial	173
Agricultural	176

INDUSTRY STRUCTURE

General	179
Industry Composition	180
Gypsum Product Market Share	185
USG	186
National Gypsum	187
Georgia-Pacific	188
Saint-Gobain (CertainTeed)	188
Other Significant Companies	189
Gypsum Board Capacity	190
Vertical & Horizontal Integration	194
Cooperative Agreements	196
Manufacturing	201
Marketing	204
Distribution	205
Mergers & Acquisitions	206

COMPANY PROFILES

American Electric Power	209
Carastar Industries	210
Compania Minera Caopas	212
Compania Occidental Mexicana	213
Duke Energy	213
E.ON AG	215
Eagle Materials	216
Federal Gypsum Company	219
FirstEnergy Corporation	220
Harrison Gypsum Company	221
Holloway (HM) Incorporated	222
Huntsman Corporation	223
Koch Industries	225
Lafarge SA	228
National Gypsum	231
New West Gypsum Recycling	234
NiSource Incorporated	235
Pacific Coast Building Products	236
Panel Rey	238
Potash Corporation of Saskatchewan	239
Reliant Energy Incorporated	240
Saint-Gobain	241
Taylor Recycling Facility	244
Temple-Inland Incorporated	245
Tennessee Valley Authority	247
USG Corporation	248
Wilson (Art) Company	254
Other Companies Mentioned in the Study	255

List of Tables/Charts

EXECUTIVE SUMMARY

1 Summary Table3

MARKET ENVIRONMENT

1 North America Demographic & Household Trends6
 2 North America Macroeconomic Environment8
 3 United States Macroeconomic Environment 11
 4 Canada Macroeconomic Environment 12
 5 Mexico Macroeconomic Environment 14
 6 North America Construction Fixed Investment 16
 7 North America Residential Building Fixed Investment 18
 8 North America Housing Starts 21
 9 North America Nonresidential Building Fixed Investment 24
 10 North America Nonbuilding Construction Fixed Investment 25
 11 North America Cement Production 27
 12 North America Agriculture Land Use..... 32
 13 North America Crude Gypsum Market, 1996-2006 38
 Cht North America Crude Gypsum Market Trends, 1997-2006..... 39
 14 North America Gypsum Product Pricing Trends 40
 15 Gypsum Board Pricing Dynamics, 1996-2006 44
 Cht Gypsum Board Price-Capacity Utilization Relationship, 1996-2006 . 45
 Cht World Gypsum Mine Production by Region, 2006..... 52
 16 World Gypsum Mine Production 53

GYPSUM SUPPLY & DEMAND

1 North America Gypsum Supply & Demand 61
 2 North America Gypsum Mine Production, 2006..... 63
 3 Selected Synthetic Gypsum Supply Arrangements 67
 Cht North America Crude Gypsum Consumption by Source, 1996-2016.. 69
 4 United States Gypsum Supply & Demand 70
 5 United States Gypsum Mine Production, 2006..... 72
 6 Canada Gypsum Supply & Demand 74
 7 Canada Gypsum Mine Production, 2006 76

8 Mexico Gypsum Supply & Demand..... 78
 9 Mexico Gypsum Mine Production, 2006. 80

GYPSUM PRODUCT OVERVIEW

Cht North American Gypsum Industry Flow Chart, 2006 84
 1 North America Gypsum Product Demand by Type 86
 2 North America Gypsum Product Demand by Country..... 87
 Cht North America Gypsum Product Demand by Country, 1996-2016 88

CALCINED GYPSUM PRODUCTS

1 North America Calcined Gypsum Product Demand by Type & Country 92
 2 North America Gypsum Board Demand by Country..... 98
 3 North America Gypsum Board Demand by Type 101
 Cht North America Gypsum Board Demand by Type, 2006 102
 4 North America Regular Gypsum Board Demand 105
 5 North America Type X Gypsum Board Demand 109
 6 North America Water-Resistant Gypsum Board Demand 112
 7 North America Sheathing Gypsum Board Demand 114
 8 North America Veneer Gypsum Board Demand 116
 9 North America Mobile Home Gypsum Board Demand 119
 10 North America Ceiling Tile Demand 121
 11 North America Prefinished & Other Gypsum Board Demand 123
 12 North America Gypsum Board Demand by Market 125
 13 North America Residential Gypsum Board Demand 126
 14 North America Nonresidential Building Gypsum Board Demand 130
 15 North America Other Markets for Gypsum Board 133
 16 North America Gypsum Demand in Building Plasters 136
 17 North America Gypsum Demand in Industrial Plasters..... 140

UNCALCINED GYPSUM PRODUCTS

1 North America Uncalcined Gypsum Product Demand by Type & Country 143

Cht North America Uncalcined Gypsum Demand by Type, 2006 144
 2 North America Gypsum Demand in Cement..... 146
 3 North America Gypsum Demand in Agriculture..... 149
 4 North America Uncalcined Gypsum Demand in Fillers & Other Products 151

MARKETS

1 North America Gypsum Product Markets 154
 2 North America Construction Demand for Gypsum Products 157
 Cht North America Construction Demand for Gypsum Products by Market & Product, 2006 158
 3 North America Residential Construction Demand for Gypsum Products 160
 4 North America New Residential Construction Demand for Gypsum Products 163
 5 North America Residential Improvement & Repair Demand for Gypsum Products 165
 6 North America Nonresidential Building Construction Demand for Gypsum Products 167
 7 North America New Nonresidential Building Construction Demand for Gypsum Products 169
 8 North America Nonresidential Building Improvement & Repair Demand for Gypsum Products 170
 9 North America Nonbuilding Construction Demand for Gypsum Products 173
 10 North America Industrial Demand for Gypsum Products by Product & Country 176
 11 North America Agricultural Demand for Gypsum Products 178

INDUSTRY STRUCTURE

1 North America Gypsum Product Sales by Company, 2006 184
 Cht North America Gypsum Product Market Share, 2006 186
 Cht North America Gypsum Board Capacity, 1996-2011 192
 2 North America Gypsum Board Capacity by Producer, 2006 193
 3 Selected Cooperative Agreements 199
 4 Selected Acquisitions & Divestitures .. 207

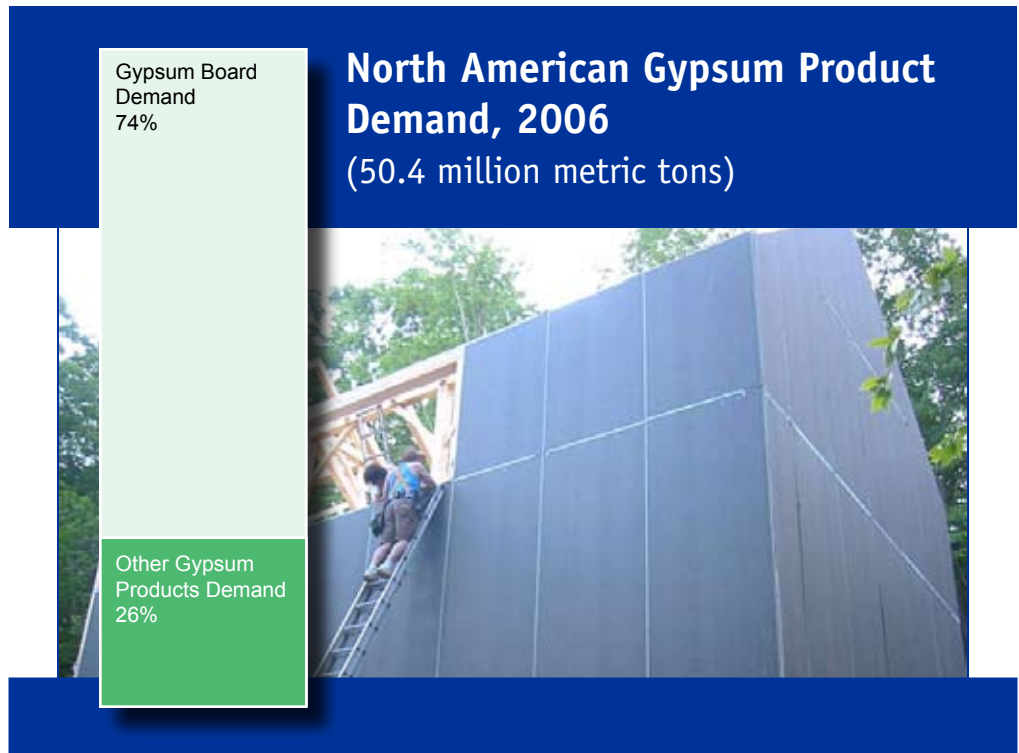
Strength in the nonresidential building market for gypsum will help offset weakness in the larger residential construction market, the result of a sluggish outlook for new single-family housing.

Nonresidential building market to grow the fastest

Demand for gypsum products in North America is forecast to grow 1.6 percent annually through 2011 to 54.6 million metric tons. Gypsum board is the dominant gypsum product segment, accounting for about three-quarters of demand. Demand for gypsum board is projected to rise 1.4 percent annually to 42 billion square feet in 2011. Nonresidential building markets will offer the best opportunities for gypsum products over the forecast period, with gains fueled by a rebound in the US market and continued economic expansion in Mexico. Strength in the nonresidential building market will help offset weakness in the larger residential construction market, which is the result of a sluggish outlook for new single-family housing construction in the US and Canada.

Type X, sheathing gypsum board to be fastest growing

In the Canadian and much larger US markets, demand for gypsum board through 2011 will be tempered by a sharp deceleration in the residential construction market, offset by a sharp acceleration in the nonresidential construction market. As a result, those board types used more intensely in nonresidential construction (e.g., type X, sheathing) will experience faster demand growth than gypsum board as a whole. The smaller Mexican market will post the fastest growth of more than four percent



per annum. Gains in the Mexican market for gypsum board will benefit from government initiatives to relieve the nation's housing deficit, as well as from further market penetration as construction methods amenable to gypsum board become more widely adopted.

Demand for gypsum as an additive to cement will advance at the rate of 2.6 percent annually, growing faster than other uncalcined products such as agricultural gypsum and gypsum filler. Driven by the accelerating growth of nonresidential construction throughout North America, demand for gypsum as a cement additive will reach 8.5 million metric tons in 2011.

Synthetic gypsum to continue supplanting mined

Synthetic gypsum is expected to continue to supplant mined gypsum for use in calcined gypsum products. Synthetic gypsum accounted for 20 percent of gypsum demand in 2006, a substantial increase from its seven percent share in 1996. This share is expected to rise to 28 percent by 2011. The vast majority of synthetic gypsum is supplied as a byproduct of the flue gas desulfurization process of coal-fired power generators. Synthetic gypsum offers substantial cost savings over mined gypsum. As a result, nearly every gypsum board plant constructed in the past decade has been designed for synthetic gypsum supply.

Sample Text, Table & Chart

CALCINED GYPSUM PRODUCTS

Mobile Home Gypsum Board -- Demand in North America for mobile home gypsum board is projected to grow 1.0 percent annually through 2011 to 370 billion square feet. This represents a turnaround from a decline of 1.0 percent annually during the 1996-2006 period. US manufacturing is expected to rebound as the industry recovers from the economic problems that weakened the economy in 2008. Advances in demand for mobile home gypsum board are expected to be offset by increases in the average number of housing units. Despite these gains, demand for mobile home gypsum board in 2011 will still only be about one-quarter of what it was in 1996 during the US manufactured housing boom.

Mobile home gypsum board is used to construct the walls and ceilings of manufactured housing, or HUD-code housing, which is wood-frame housing built in a factory environment on a metal chassis that is used to transport the home to the building site. The principal difference between mobile home gypsum board and other varieties of gypsum board is the thickness. Mobile home gypsum board is significantly thinner than traditional gypsum board, with the standard mobile home gypsum board being 5/16-inch thick. Accordingly, the board is among the lightest types of gypsum board. Unlike most North American gypsum products, the US accounts for virtually all North American demand for mobile home gypsum board.

The two principal competitive factors in the mobile home gypsum board industry are price and the speed with which the board is installed. Price is key in that manufactured housing production has intense pressures to restrain the cost of the finished product, which is accomplished by controlling raw material costs. As a result, mobile home gypsum boards have a core of relatively inexpensive regular gypsum. However, some boards are made with type

Copyright 2007 The Freedonia Group, Inc.

**SAMPLE
TEXT**

TABLE VII-4

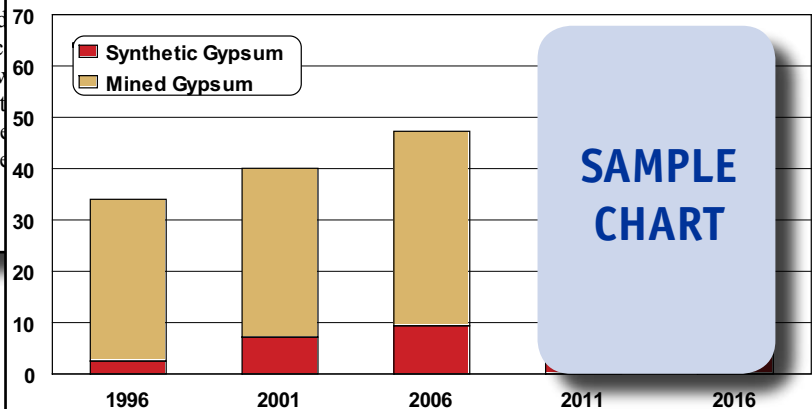
NORTH AMERICA NEW RESIDENTIAL CONSTRUCTION DEMAND FOR GYPSUM PRODUCTS (thousand metric tons)

Item	1996	2001	2006	2011	2016
Total Housing Starts (000 units)	2				50
metric tons gypsum/start					1.0
New Res Gypsum Prdt Demand	14				20
Gypsum Board	12				40
Gypsum in Cement	1				75
Building & Industrial Plaster					05
\$/metric ton					34
New Residential Gypsum Prdt (mil \$)	1				40

**SAMPLE
TABLE**

CHART III-1

NORTH AMERICA CRUDE GYPSUM CONSUMPTION BY SOURCE, 1996-2016 (million metric tons)



**SAMPLE
CHART**

Sample Profile, Table & Chart

COMPANY PROFILES

Panel Rey SA

Serafin Pena 935 Sur
 Monterrey, Nuevo Leon 64000 MEXICO
 52-81-8345-0050
<http://www.parey.com>

Annual Sales:
 Employment:
 Key Products:

SAMPLE PROFILE

Panel Rey manufactures wallboard textures, joint compounds and drywall accessories used in drywall construction. In addition, the Company manufactures several manufacturers' panels, fastening products and construction accessories. Panel Rey is a subsidiary of Grupo PROMAX (Mexico), an industrial group involved in the pulp and paper, chemicals, home building materials and transportation industries.

The Company manufactures an array of gypsum wallboard products, including moisture-resistant, fire-resistant, standard and gypsum sheathing. Panel Rey's moisture-resistant wallboards have cores and sides made of gypsum and other materials, for resistance to moisture and humidity. The Company produces fire-resistant wallboards with fiberglass reinforcement for heat delay, and a 21-percent water content that steams upon exposure to heat and prevents heat transfer. Panel Rey's standard wallboard has a gypsum core pressed between two cardboard, for use in wall divisions. The Company's gypsum sheathing panels are made with wax-treated, water-resistant cores, and designed for use as exterior coatings. The Company also produces drywall studs and tracks as wallboard installation components. Panel Rey also manufactures joint compounds in SUPER LIGHT, standard, MAXIMO multiuse, base coat and ceiling texture varieties.

TABLE VI-1

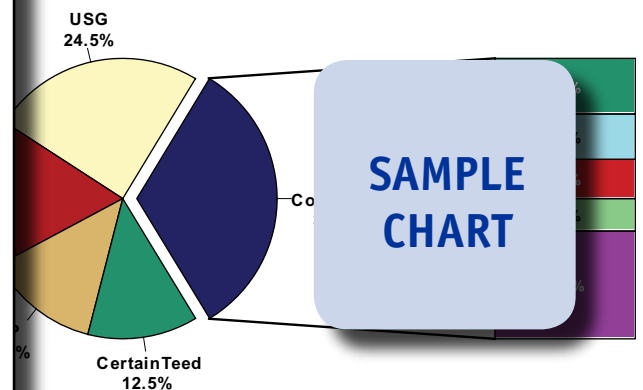
NORTH AMERICA UNCALCINED GYPSUM PRODUCT DEMAND BY TYPE & COUNTRY (thousand metric tons)

Item	1996	2001	2006	2011	2016
Cement Production (mil metric tons)	116.3	133.8	155.0	178.5	206.5
m tons gypsum/000 m tons cement	77.7	75.3	75.1	72.9	70.7
Uncalcined Gypsum Product Demand					
By Type:					
Gypsum in Cement					
Agricultural Gypsum					
Fillers & Other					
By Country:					
United States					
Canada					
Mexico					
\$/metric ton					
Uncalcined Gypsum (mil \$)					

SAMPLE TABLE

CHART VIII-1

AMERICA GYPSUM PRODUCT MARKET SHARE, 2006 (\$5.2 billion)



SAMPLE CHART

ORDER INFORMATION

Five Convenient Ways to Order

INDUSTRY MARKET RESEARCH FOR BUSINESS LEADERS, STRATEGISTS, DECISION MAKERS

Freedonia

ONLINE: www.freedoniagroup.com

MAIL: Print out and complete the order form and send to The Freedonia Group (see address at the bottom of this form)

PHONE: Call toll free, 800.927.5900 (US) or + 1 440.684.9600

FAX: + 1 440.646.0484 (US)

EMAIL: info@freedoniagroup.com

Free Handling & Shipping

There is NO charge for handling or UPS shipping in the US. Expect delivery in 3 to 5 business days. Outside the US, Freedonia provides free airmail service. Express delivery is available at cost.

Orders Outside of the US

Checks must be made payable in US funds, drawn against a US bank and mailed directly to The Freedonia Group. For wire transfers please contact our customer service department at info@freedoniagroup.com. Credit cards accepted.

Credit Card Orders

For convenience, Freedonia accepts American Express, MasterCard or Visa. Credit card purchases must include account number, expiration date and authorized signature.

Save 15%

If you order three (3) different titles at the same time, you can receive a 15% discount. If your order is accompanied by a check or wire transfer, you may take a 5% cash discount (discounts do not apply to Corporate Use Licenses).

Corporate Use License

Now every decision maker in your organization can act on the key intelligence found in all Freedonia studies. For an additional \$2300, companies receive unlimited use of an electronic version (PDF) of the study. Place it on your intranet, e-mail it to coworkers around the world, or print it as many times as you like,

[Click here to learn more about the Corporate Use License](#)

ORDER FORM

F-WEB.2225

Gypsum Products in North America..... \$4500

Corporate Use License (add to study price) * + \$2300

___ Additional Print Copies @ \$500 each *
Total (including selected option) \$_____

Enclosed is my check (5% discount) drawn on a US bank and payable to The Freedonia Group, Inc., in US funds (Ohio residents add 7.75% sales tax)

Bill my company American Express MasterCard Visa

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Credit Card #

MM				YY			

Expiration

Signature _____

Name _____

Title _____

Company _____

Division _____

Street _____
(No PO Box please)

City/State/Zip _____

Country _____

Phone _____ Fax _____

Email _____

* Please check appropriate option and sign below to order an electronic version of the study.

Corporate Use License Agreement

The above captioned study may be stored on the company's intranet or shared directory, available to company employees. Copies of the study may be made, but the undersigned represents that distribution of the study will be limited to employees of the company.

Signature _____

Individual Use License Agreement

The undersigned hereby represents that the above captioned study will be used by only ___ individual(s) who are employees of the company and that the study will not be loaded on a network for multiple users. In the event that usage of the study changes, the Company will promptly notify Freedonia of such change and will pay to Freedonia the appropriate fee based on Freedonia's standard fee schedule then in effect. Note: Entire company corporate use license, add \$2300; one additional user, add \$400; two additional users, add \$800; three additional users, add \$1200.

Signature _____

The Freedonia Group, Inc. 767 Beta Drive • Cleveland, OH • 44143-2326 • USA • Web site: www.freedoniagroup.com
Tel US: 800.927.5900 or + 1 440.684.9600 • Fax: + 1 440.646.0484 • e-mail: info@freedoniagroup.com

OTHER STUDIES

Composite & Plastic Lumber

US wood-plastic composite and plastic lumber demand will grow 10% yearly through 2011, based on performance advantages over wood. Wood-plastic composites will fare better than plastic lumber. Molding and trim will remain a key market while windows and doors, decking and other applications will lead gains. This study analyzes the \$3.4 billion US composite and plastic lumber industry, with forecasts for 2011 and 2016 by material, application and market. It also evaluates company market share and profiles major players.

#2239 09/2007..... \$4500

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

Nanotechnology in Construction

US demand for nanomaterials in construction will reach \$100 million in 2011, and leap to \$1.75 billion by 2025. Coatings will be the largest application, followed by composites and concrete additives. Nanoscale silica, titanium dioxide, and clay will post substantial gains. This study analyzes the US market for nanomaterials in construction, with forecasts for 2011, 2016 and 2025 presented by product, application and market. It also considers market environment factors and profiles leading industry players.

#2185 05/2007..... \$4500

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 for 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

World Cement & Concrete Additives

Global demand for cement and concrete additives will grow 5.1% annually through 2010. Gains will be fueled by the increased acceptance of additives in high-volume developing markets for cement, and by higher additive loadings and costlier product (e.g., superplasticizers) use in mature markets. This study analyzes the \$8.7 billion world cement and concrete additive industry for 2010 and 2015 by type, market, world region and for 24 countries. It also evaluates company market share and profiles major producers.

#2135 12/2006..... \$5400

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)