

[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 & Corporate Use License 7](#)

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



World Insulation

Industry Study with Forecasts for **2016 & 2021**

Study #2956 | October 2012 | \$6300 | 376 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
World Economic Overview	5
Recent Historical Trends	5
World Economic Outlook	7
World Demographic Overview	11
Population	12
Urbanization Patterns	13
Households	15
World Fixed Investment Overview	17
World Construction Outlook	19
Residential Buildings	21
Nonresidential Buildings	23
World Refrigerator & Freezer Shipments	25
Material Variations in Thermal Resistance & R-Values	27
Regulatory, Health, & Environmental Considerations	31
Environmental Considerations	31
Health Considerations	33
Energy Considerations	35
Recycling	38
Green Labeling	41

WORLD OVERVIEW

General	44
World Insulation Outlook	45
World Regional Demand by Insulating Capacity (R-1 Value)	46
Insulation Demand & Fixed Investment	49
World Regional Insulation Demand by Value	51
World Insulation Production by Region	56
World Insulation Trade Flows	58

MATERIALS & MARKETS

General	60
Insulation Demand by Material	62
Foamed Plastics	65
Value Trends	67
Weight & Market Trends	70
Fiberglass	73
Value Trends	75
Weight & Market Trends	77
Mineral Wool	80
Value Trends	81
Weight & Market Trends	83
Other Insulation Materials	86
Value Trends	88
Weight & Market Trends	89
Insulation Demand by Market	92
Construction	94
Industrial, HVAC, & OEM	95

NORTH AMERICA

General	97
---------------	----

Insulation Supply & Demand	99
United States	101
Canada	106
Mexico	111

WESTERN EUROPE

General	116
Insulation Supply & Demand	118
Germany	121
France	126
Italy	131
United Kingdom	136
Spain	141
Netherlands	145
Other Western Europe	150

ASIA/PACIFIC

General	159
Insulation Supply & Demand	161
China	164
Japan	170
India	174
South Korea	179
Australia	183
Indonesia	188
Taiwan	192
Thailand	197
Other Asia Pacific	202

OTHER REGIONS

Central & South America	209
General	209
Insulation Supply & Demand	211
Brazil	214
Other Central & South America	218
Eastern Europe	224
General	224
Insulation Supply & Demand	226
Russia	229
Poland	234
Other Eastern Europe	239
Africa/Mideast	246
General	246
Insulation Supply & Demand	248
Turkey	250
Other Africa/Mideast	254

INDUSTRY STRUCTURE

General	262
Industry Composition	263
Market Leaders	266
Other Key Producers	270
Product Development & Manufacturing	270
Marketing	273
Distribution	275
Mergers & Acquisitions	276
Cooperative Agreements	279

COMPANY PROFILES

Aislantes Minerales	286
---------------------------	-----

Armcell International	288
BASF SE	291
Bayer AG	297
BBMG Corporation	299
Beijing New Building Materials	300
Berkshire Hathaway	302
Bridgestone Corporation	307
Byucksan Corporation	309
CRH plc	310
CSR Limited	312
Dow Chemical	314
Finetec Corporation	319
Fletcher Building	320
Hood Companies	322
Huntsman Corporation	324
Italmobiliare SpA	326
KCC Corporation	328
Kingspan Group	329
Knauf Gips	332
NICHIAS Corporation	336
Ningbo Firewheel Thermal Insulation & Sealing	338
Nitto Boseki	339
Norisol A/S	340
Owens Corning	342
Paroc Group	347
PENOPLEX St. Petersburg	349
Recticel SA	350
Rockfibras do Brasil Industria e Comercio	351
Rockwool International	353
Saint-Gobain	357
Siam Cement	364
Sto AG	366
Styron LLC	368
swisspor Management	369
TechnoNICOL Corporation	371
Thermafiber Incorporated	373
Uralita SA	375

List of Tables/Charts

EXECUTIVE SUMMARY

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

MARKET ENVIRONMENT

1 World Gross Domestic Product by Region ..	11
2 World Population by Region	13
3 World Urban Population by Region	15
4 World Households by Region	17
5 World Fixed Capital Investment by Region	19
6 World Construction Expenditures by Region	21
7 World Residential Construction Expenditures by Region	23
8 World Nonresidential Construction Expenditures by Region	24
9 World Refrigerator & Freezer Shipments by Region	26
10 Insulation R-Values by Material	30

(continued on following page)

List of Tables/Charts

(continued from previous page)

WORLD OVERVIEW

1 World Insulation Demand by Insulating Capacity.....	48
Cht Insulation Demand Per Capita/ Fixed Investment Per Capita Relationship, 2011.....	50
2 World Insulation Demand by Value	54
Cht World Insulation Demand by Region, 2011.....	55
3 World Insulation Production by Region	57
4 World Insulation Net Exports.....	59

MATERIALS & MARKETS

1 World Insulation Demand by Material	64
Cht World Insulation Demand by Material, 2011.....	65
2 World Foamed Plastic Insulation Demand Value by Region.....	69
3 World Foamed Plastic Insulation Demand in Metric Tons by Region & Market.....	71
Cht World Foamed Plastic Insulation Demand by Region, 2011	72
4 World Fiberglass Insulation Demand Value by Region.....	77
5 World Fiberglass Insulation Demand in Metric Tons by Region & Market.....	79
Cht World Fiberglass Insulation Demand by Region, 2011	80
6 World Mineral Wool Insulation Demand Value by Region.....	83
7 World Mineral Wool Insulation Demand in Metric Tons by Region & Market.....	85
Cht World Mineral Wool Insulation Demand by Region, 2011	86
8 World Other Insulation Demand Value by Region.....	89
9 World Other Insulation Materials Demand in Metric Tons by Region & Market.....	91
Cht World Other Insulation Materials Demand by Region, 2011	92
10 World Insulation Demand by Market	93

NORTH AMERICA

1 North America: Market Environment for Insulation.....	98
2 North America: Insulation Supply & Demand.....	101
3 United States: Market Environment for Insulation.....	103
4 United States: Insulation Supply & Demand.....	106
5 Canada: Market Environment for Insulation.....	108
6 Canada: Insulation Supply & Demand	110
7 Mexico: Market Environment for Insulation.....	112
8 Mexico: Insulation Supply & Demand.....	115

WESTERN EUROPE

1 Western Europe: Market Environment for Insulation.....	118
2 Western Europe: Insulation Supply & Demand.....	121
3 Germany: Market Environment for Insulation.....	123
4 Germany: Insulation Supply & Demand ..	126
5 France: Market Environment for Insulation.....	128
6 France: Insulation Supply & Demand	131
7 Italy: Market Environment for Insulation	133
8 Italy: Insulation Supply & Demand.....	136
9 United Kingdom: Market Environment for Insulation.....	138
10 United Kingdom: Insulation Supply & Demand.....	140
11 Spain: Market Environment for Insulation.....	142
12 Spain: Insulation Supply & Demand.....	145
13 Netherlands: Market Environment for Insulation.....	147
14 Netherlands: Insulation Supply & Demand.....	149
15 Other Western Europe: Market Environment for Insulation.....	151
16 Other Western Europe: Insulation Supply & Demand.....	154
17 Other Western Europe: Insulation Demand by Country.....	155

ASIA/PACIFIC

1 Asia/Pacific: Market Environment for Insulation.....	161
2 Asia/Pacific: Insulation Supply & Demand.....	164
3 China: Market Environment for Insulation.....	166
4 China: Insulation Supply & Demand.....	169
5 Japan: Market Environment for Insulation.....	171
6 Japan: Insulation Supply & Demand	174
7 India: Market Environment for Insulation.....	176
8 India: Insulation Supply & Demand	178
9 South Korea: Market Environment for Insulation.....	180
10 South Korea: Insulation Supply & Demand.....	183
11 Australia: Market Environment for Insulation.....	185
12 Australia: Insulation Supply & Demand ..	187
13 Indonesia: Market Environment for Insulation.....	189
14 Indonesia: Insulation Supply & Demand.	192
15 Taiwan: Market Environment for Insulation.....	194
16 Taiwan: Insulation Supply & Demand.....	197
17 Thailand: Market Environment for Insulation.....	199

18 Thailand: Insulation Supply & Demand ..	201
19 Other Asia/Pacific: Market Environment for Insulation.....	203
20 Other Asia/Pacific: Insulation Supply & Demand.....	206
21 Other Asia/Pacific: Insulation Demand by Country	207

OTHER REGIONS

1 Central & South America: Market Environment for Insulation.....	211
2 Central & South America: Insulation Supply & Demand.....	213
3 Brazil: Market Environment for Insulation.....	215
4 Brazil: Insulation Supply & Demand	218
5 Other Central & South America: Market Environment for Insulation.....	220
6 Other Central & South America: Insulation Supply & Demand.....	222
7 Other Central & South America: Insulation Demand by Country	223
8 Eastern Europe: Market Environment for Insulation.....	226
9 Eastern Europe: Insulation Supply & Demand.....	229
10 Russia: Market Environment for Insulation.....	231
11 Russia: Insulation Supply & Demand.....	234
12 Poland: Market Environment for Insulation.....	236
13 Poland: Insulation Supply & Demand	238
14 Other Eastern Europe: Market Environment for Insulation.....	240
15 Other Eastern Europe: Insulation Supply & Demand.....	243
16 Other Eastern Europe: Insulation Demand by Country	244
17 Africa/Mideast: Market Environment for Insulation.....	247
18 Africa/Mideast: Insulation Supply & Demand.....	250
19 Turkey: Market Environment for Insulation.....	252
20 Turkey: Insulation Supply & Demand	254
21 Other Africa/Mideast: Market Environment for Insulation.....	256
22 Other Africa/Mideast: Insulation Supply & Demand.....	259
23 Other Africa/Mideast: Insulation Demand by Country	260

INDUSTRY STRUCTURE

1 World Insulation Sales by Company, 2011.....	265
Cht World Insulation Market Share, 2011	267
2 Selected Acquisitions & Divestitures.....	278
3 Selected Cooperative Agreements.....	280

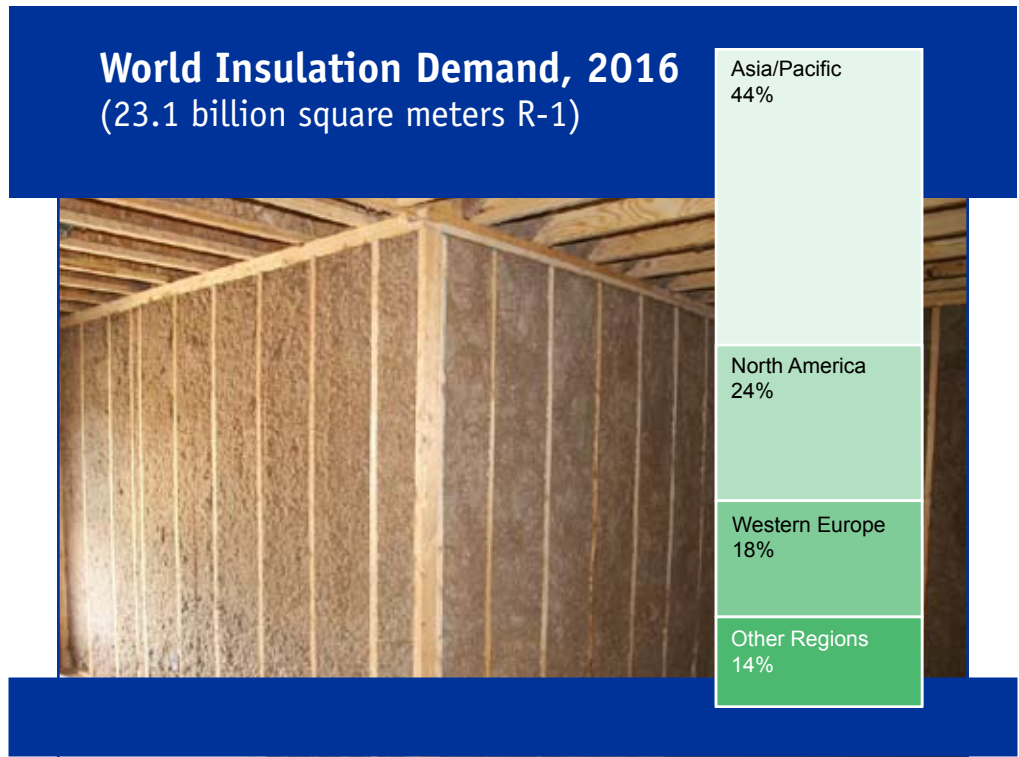
In developing countries, demand will be driven by rising building construction and industrial activity. In most developed countries, sales will rebound from housing market collapses.

World demand to rise 5.5% annually through 2016

Global insulation demand is forecast to rise 5.5 percent annually to 23.1 billion square meters of R-1 value in 2016, a substantial acceleration from the 2006-2011 rate. In developing countries, insulation demand is expected to expand at a healthy pace due to rising building construction and industrial activity. In most developed countries, insulation sales are expected to rebound after falling in 2008 and 2009 due to housing market collapses in several countries. Additionally, government efforts to reduce energy consumption will lead to the adoption of new building codes and increased insulation usage.

Home construction to be primary driver of demand

Solid residential building construction gains will be the primary driver of demand. In North America alone, insulation sales for residential applications will rise 9.2 percent annually between 2011 and 2016, primarily due to a recovery of the housing market in the US. In Western Europe, a rebound in several countries' housing markets will cause insulation demand to post moderate gains through 2016, as opposed to the decline of the 2006-2011 period. In many West European countries, government efforts to encourage insulation use in order to lower energy consumption will also contribute to demand. In developing countries in the Asia/Pacific region,



Africa/Mideast region, and Central and South America, rural-to-urban migration will stimulate building activity in urban areas, and therefore insulation demand. Rising per capita incomes will allow for the use of modern building techniques and materials, including insulation. In some countries, the adoption of minimum insulation requirements will also contribute to demand.

Demand for insulation in the industrial, HVAC, and OEM markets will be driven by expanding manufacturing activity, appliance output, and HVAC system installations. Worldwide shipments of refrigerators and freezers, for example, are expected to post gains of 2.6 percent annually through 2016. Additionally,

global HVAC installations are projected to grow 6.1 percent annually during the same time.

Asia/Pacific region to be fastest growing market

The fastest growth in insulation demand through 2016 is forecast in the Asia/Pacific region, due to advances in building construction activity as well as manufacturing and industrial output. More than 53 percent of new global demand generated between 2011 and 2016 will be attributed to this region. Several Asia/Pacific countries are expected to post solid growth, including China, India, Indonesia, and Thailand.

Copyright 2012 The Freedonia Group, Inc.

[Click here to purchase online](#)

Sample Text, Table & Chart

WESTERN EUROPE

Spain: Insulation Supply & Demand

In 2011, insulation demand in Spain totaled 193 million square meters of R-1 value, accounting for five percent of total West European demand. Intensity of insulation use in Spain, relative to population and fixed investment spending, is low for the region due to the warm climate and less developed economy, when compared to West European countries. However, Spain's industrial sector, a large appliance industry, generates demand for insulation. Insulation demand in Spain between 2006 and 2011 fell almost 50 percent per year. Spain was one of the worst performing markets in Western Europe during this time period. The country's housing market collapse during the global financial crisis that began in 2008 led to losses in demand in the residential construction market. Demand in the non-residential construction market also saw huge losses as nonresidential construction expenditures declined. The industrial, HVAC, and OEM markets for insulation also fell as industrial output dropped sharply.

Between 2011 and 2016, demand for insulation in Spain is forecast to expand to 250 million square meters of R-1 value, much higher than the average. A rebound in the housing market from 2011 is expected to be the primary driver of demand. However, demand is expected to regain the pre-financial crisis high levels. Demand in the nonresidential construction and OEM markets will post more moderate growth as construction expenditures and industrial output

In value terms, demand in Spain is projected to grow 10 percent per year through 2016. Demand for foam insulation is expected to see the fastest gains, as these materials benefit from their increasing popularity in both construction and industrial applications. Other insulation materials will see similar growth

143

Copyright 2012

TABLE VI-11

SPAIN: MARKET ENVIRONMENT FOR INSULATION

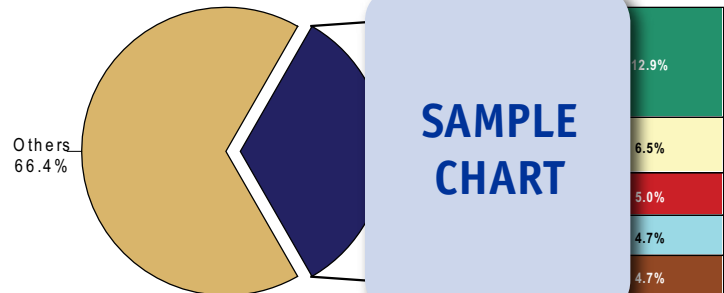
Item	2001	2006	2011	2016	2021
Population (millions)					
GDP/capita					
Gross Domestic Product (bil 2010\$)					
% of GDP					
Gross Fixed Investment (bil 2010\$)					
sq m R-1/capita					
sq m R-1/000\$ GDP					
sq m R-1/000\$ GFI					
Insulation Demand (mil sq m R-1)					

SAMPLE
TABLE

SAMPLE
TEXT

CHART IX-1

WORLD INSULATION MARKET SHARE, 2011 (\$32.3 billion)



SAMPLE
CHART

Sample Profile, Table & Forecast

COMPANY PROFILES

Aislantes Minerales SA de CV

Descartes No. 104
 Colonia Nueva Anzures
 Delegación Miraflores
 Mexico
 52-55-1036-0
<http://www.ro>

Annual Sales:
 Employment:

Key Products: expanded perlite, fiberglass, cellulose insulation; extruded polystyrene insulating plates; and pre-insulated pipe supports

Aislantes Minerales primarily manufactures thermal and acoustic mineral wool insulation for the North and South American markets. The privately held company, which operates as Rolan Aislantes Minerales, also distributes a range of insulation products in South America that are manufactured by other companies.

The Company is active in the world insulation market via the production of expanded polystyrene (EPS), mineral wool, and expanded perlite insulation. EPS insulation is sold by Aislantes Minerales under the ESPIMALIT brand name. This insulation is available in block, pipe cover, ceiling panel, and plate formats. The Company's mineral wool insulation products include VITROLAN 450 preformed pipe insulation; ROLAN 1001 insulating cement; ROLAN 1200 pipe cover; ROLAN metal mesh-faced blankets in one-face and enclosed-face varieties; and granulated and cryogenic mineral wool fiber. Other types of mineral wool insulation from the Company include PV SUPERTEMP high-temperature-resistant rigid plates; and AISLAMURO flexible,

286

Copyright 2012 The Freedonia Group, Inc.

**SAMPLE
PROFILE**

TABLE VI-12

SPAIN: INSULATION SUPPLY & DEMAND
 (million dollars)

Item	2001	2006	2011	2016	2021
Insulation Demand (mil sq m R-1)					
Residential Construction					
Nonresidential Construction					
Industrial, HVAC, & OEM					
\$/sq m R-1					
Insulation Demand					
Foamed Plastics					
Fiberglass					
Mineral Wool					
Other					
+ net exports					
Insulation Production					

**SAMPLE
TABLE**

"Shipments of insulation materials from factories in Spain are expected to increase 7.3 percent annually to \$620 million in 2016, primarily a result of industrial output rebounding from a low 2011 base. While domestic suppliers will benefit from increasing local demand, they will face increasing competition from suppliers in other West and East European countries. As such, the country's trade deficit is expected to ..."

--Section VI, pg. 144

[Click here to purchase online](#)

OTHER STUDIES

World Flat Glass

World demand for flat glass is forecast to rise 7.1 percent per year through 2016 to 9.2 billion square meters. The dominant Asia/Pacific region will continue to post the fastest gains. Fabricated flat glass demand will benefit from rapid growth in sales of energy efficient products such as solar control, insulation and low-E glass. This study analyzes the 6.6 billion square meter world flat glass industry, with forecasts for 2016 and 2021 by product, market, world region and for 21 countries. The study also evaluates company market share and profiles industry players.

#2970January 2013 \$6400

World Housing

New housing construction will reach 60.5 million units in 2016, an increase of 3.5 percent per annum. Most new units will be built in developing countries, where population and housing growth will be the strongest. Multifamily housing units will outpace single-family units. This study analyzes the 50.7 million unit world housing industry, with forecasts for 2016 and 2021 by type, world region and for 22 major countries. The study also considers market environment factors such as world economic and demographic trends, and housing construction expenditures.

#2942September 2012..... \$5500

World Drywall & Building Plaster

Worldwide sales of drywall will rise 8.6 percent annually through 2016 to 10.7 billion square meters, with China and the US claiming most new demand. The residential market will outpace its nonresidential counterpart. Global building plaster demand will rise 5.8 percent annually to 37.4 million metric tons in 2016. This study analyzes the world drywall and building plaster industry, with forecasts for 2016 and 2021 by product, market, world region and for 23 major countries. The study also evaluates company market share and profiles industry participants.

#2924 August 2012..... \$6100

Siding

Demand for siding in the US is forecast to advance 8.4 percent per year through 2016 to 96.5 million squares. Brick, stucco and fiber cement siding will see the most rapid demand gains. The South and West regions -- where these materials are most often installed -- are forecast to see the strongest growth in population and housing activity. This study analyzes the 64.5 million square US siding industry, with forecasts for 2016 and 2021 by siding material, market and US region. The study also evaluates company market share and profiles industry players.

#2875April 2012 \$5100

Insulation

US demand for insulation is forecast to rise 7.8 percent annually to \$8.9 billion in 2016. The residential market will post the most rapid gains, advancing at a double-digit pace as housing starts rebound. Fiberglass insulation will remain the market leader, while radiant barrier/reflective insulation and cellulose grow the fastest from smaller bases. This study analyzes the \$6.1 billion US insulation industry, with forecasts for 2016 and 2021 by product, market and US geographic region. The study also evaluates company market share and profiles industry players.

#2858 March 2012..... Price: \$5100

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)