

The North American Thermal Insulation Materials Market

The thermal insulation market seems to be thriving in its own stability. In North America (United States and Canada), the thermal insulation market is mature and therefore a steady contributor. It is experiencing slow but sustained growth in most segments. Since thermal insulation has been around for so long, it is experiencing a high level of competition, while a few companies hold a significant share of the market. However, revenue is expected to be sustained by the retrofit market, new construction, increasing energy-efficiency codes, and building specifications that will fuel the market at a steady pace.

The 2000 *Executive Summary* by Frost & Sullivan, San Jose, CA, reports on the thermal insulation materials market data and trends for the years 1996-2006, using 1999 as a base year. The following areas are discussed: extruded polystyrene insulation, expanded polystyrene insulation, polyisocyanurate insulation, glass fibers, mineral wool, and cellulose insulation.

Without separating the types of thermal insulation material in North America, the total revenues generated approximately \$5.46 billion in 1999. According to these findings by Frost & Sullivan, the market is expected to reach \$10.75 billion in revenues by 2006. These revenue figures are based on a compound annual growth rate of 10.1 percent for the period 2000-2006.

Major Segment Analysis

Figure 1 shows the percentage of revenues by product type for the total North American thermal insulation material market.

Figure One: Total Thermal Insulation Materials Market: Percent of Revenues by Product Type (North America), 1996-2006

Year	Extruded Polystyrene (%)	Expanded Polystyrene (%)	Polyisocyanurate (%)	Mineral Wool (%)	Class Fibers (%)	Cellulose (%)
1996	9.3	11.5	13.9	11.3	50.7	3.2
1997	8.9	11.1	14.1	11.5	51.2	3.3
1998	8.6	10.7	14.3	11.6	51.5	3.3
1999	8.3	10.3	14.7	11.7	51.7	3.3
2000	7.9	10.1	15.0	11.8	51.8	3.3
2001	7.6	10.0	15.3	11.9	51.9	3.3
2002	7.3	9.8	15.5	12.0	52.0	3.3
2003	7.1	9.7	15.6	12.0	52.2	3.3
2004	6.8	9.7	15.7	12.1	52.4	3.3
2005	6.6	9.6	15.8	12.1	52.5	3.3
2006	6.4	9.5	16.0	12.1	52.7	3.3

Note: All figures are rounded, the base year is 1999. *Source: Frost & Sullivan*

The glass fibers segment of the market continues to get dominant share with 51.7 percent of the total revenues in 1999. Polyisocyanurate has 14.7%, mineral wool, 11.7%; expanded polystyrene, 10.3%; extruded polystyrene 8.3% and cellulose 3.3%. All of these issues are dependent upon the type of insulation and its demand in the market.

Strong energy codes and utilities savings are major market drivers for the entire insulation industry. New residential construction spurs growth for glass fiber, mineral wool, and cellulose, while the replacement/retrofit segment provides a boost to extruded polystyrene and polyisocyanurate. A rather tight supply of glass fiber opens up room for mineral wool and cellulose in that residential area.

Two important factors are hampering the industry growth potential:

- The overall slowdown in construction negatively impacting the entire industry.
- The mindset of many who view insulation as a commodity item, and don't see much differentiation among the products—something that affects each individual product's market.

THERMAL INSULATION MARKET ISSUES

Technology

As with any other market, technology has become a vital tool in the growth of the insulation market. According to Frost & Sullivan, technologies applied to thermal insulation have generally focused on increasing energy efficiency through improved manufacturing techniques. Increases in high efficiencies have been achieved as manufacturers switch from older processes and new blowing agents for insulation production.

The Internet is also playing an increasing role in shaping distribution within the thermal insulation materials market. Most manufacturers now offer product information on the web, and some have incorporated on-line ordering. The Internet is providing end-users more knowledge and allowing for comparison shopping between companies and product lines.

Environmental Concerns

Ozone-depleting substances (such as hydrochlorofluorocarbons) remain an environmental concern and will directly affect manufacturers within the extruded polystyrene and polyisocyanurate segments. Manufacturers will have to seek acceptable alternative blowing agents as phase-out implementation dates draw nearer.

Also, recycled content has become an increasingly important concern to home and building owners, specifiers, and architects as everyone seeks more environmentally friendly "green" products for use in construction. The government has implemented comprehensive procurement guidelines designating recycled material content levels.



A worker installs board insulation.

The Findings

According to Frost & Sullivan, the thermal insulation market is continuing to experience growth. Companies are competing with one another for product segments, and the trend for the

manufacturer has moved toward being able to offer complete insulation systems. ■

Insulation Product	Total Revenues 1999	% Market Growth	Future Growth
Extruded Polystyrene	\$452.6 million	5.4%	moderate growth
Expanded Polystyrene	\$564.8 million	6.1%	moderate growth
Polyisocyanurate	\$803.3 million	13.0%	slight decline in growth because of changes in blowing agents & building construction cycles
Glass Fiber	\$2.83 billion	10.1%	steady growth
Mineral Wool	\$640.0 million	10.6%	moderate growth
Cellulose Insulation	\$179.5 million	9.9%	moderate growth

Note: All figures are rounded, the base year is 1999. Source: Frost & Sullivan

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