



UNCSAAL

Unione Nazionale
Costruttori
Serramenti
Alluminio
Acciaio
Leghe

*Italian
Architectural
Aluminium
and Steel
Manufacturers
Association*

Via Chieti 8
20154 Milano
tel. +39 02 3192061
fax +39 02 34537610
C.F. 80094510155



Uncsaal Economic Studies Commission

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The building envelope market in Italy

Metal Frames
Curtain Walls

Year 2005
2006 Scenarios



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Carmine Garzia, Coordinator
*Professor of Business Strategy and Policy
at the Bocconi University of Milan*



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The door and window frame industry

The door and window frame industry comes from three main manufacturing industries (mechanical, chemistry and wood industry), but because of the type of final product it is linked to the construction industry.

In addition to making external fixtures, meaning windows, doors, industrial doors, roller gates, louvered shutters and sunbreakers (in metal-steel, aluminum and special alloys-wood and PVC), the same sectors involve trade professionals who make indoor fixtures-more generally, indoor partition systems, normally identified as "partitions"-curtain walls and façade systems or coverings.

The finished product of the door and window frame industry has a highly developed and complex secondary market of products - nearly all with high added value (unfinished parts and components) - and processes, primarily linked to the following product categories:

- extruded aluminum profiles;
- steel laminates;
- steel, aluminum and other alloy sheet metals;
- extruded PVC profiles;
- lumber and wood strips;
- sealants and adhesives;
- handles and moving accessories;
- locks and safety locks;
- painting;
- glass and insulating panes;
- natural stone and ceramic products.

On the basis of the statistical data analyzed (from the ISTAT Intermediate Industry Census to reports by the Confindustria Research Center), it can be estimated that those who handle the finished product, thus manufacturers of frames, partitions and curtain walls, correspond to approximately 35,000 companies fairly evenly distributed throughout the country. Among these approximately 16,000 use primarily metal, approximately 17,000 wood and 2,000 plastic materials (PVC).

The sector, similar to others related to the construction industry, is characterized by a high number and complexity of businesses. The prevailing business dimension is the small and very small company (which ISTAT calls "craftsmen"), representing over 75% of the total. Specifically, half of all metal door and window frame companies have no employees (single professionals).



With regard to the secondary economy, it is estimated that there are approximately 700 Italian companies involved in the production and processing of aluminum profiles nationwide. 2,500 companies handle, assemble and sell glass and window panes, while less than a hundred “finish,” in jargon (with painting, anodizing and other surface treatments) the surfaces of the metal parts of frames and façades.

Approximately 600 companies are involved in producing handles, moving accessories, locks, padlocks and keys--an industry practically dedicated to the door and window frame industry. Finally, there are a few other companies--a few dozen, in Italy, and few of these are specialized in the door and window frame industry--that make gaskets, while even fewer make sealants.



The door and window frame market: increased in value in 2005

The slogan that may objectively summarize the trend of the building envelope market in 2005 overall may be this: value went up for both those who sold and those who bought.

Indeed, the signals that emerged from the market, together with statistical measures, allow us to estimate a **6.00% increase in turnover in 2005** compared to the previous year, accompanied among other things by a slight drop in volume [-3.50% compared to the previous year].

The increase in market value compared to the drop in units sold, recorded for the second consecutive year, and was caused by two factors:

- The rising cost of raw materials [metals, wood and plastics], also as a consequence of the increase in energy and transformation costs.
- The market success of frames with high added value, due to both a greater consumer awareness regarding quality, and the ever greater attention by planners and engineers to the role of the frame in the building envelope, and encouraged by a slow but progressive industrialization of the product.

First of all, it should be pointed out that the rising demand for high-quality frames has found a natural outlet for offerings by Italian businesses in the industry.

We thus see growth in the unit value of every single frame manufactured, but that is accompanied by a much more significant growth in the quality and performance of the frame:

The standard frame sold in 2005 is worth much more than that 6.00% represented in the average price increase.



The door and window frame market: trends

Setting a 2005 result for the entire European frames market, without emphasizing the subjective character of each nation, would not be a representative trend. 2005 has been characterized by an uneven trend in the European system: recovery of public and private construction in France, held in Great Britain, recession in Germany, good results from markets in the Mediterranean [Spain and Greece], strong development of Eastern markets, with especially strong performance in Hungary and Poland.

As we have seen, Italy has confirmed a strong hold on market trends, even greater than that of the overall construction market.

For 2006, Uncsaal is already showing a market trend that essentially upholds that of the previous year, but a drop may be possible due to the uncertainty of macroeconomic estimates hovering between a recessive consolidation within the European Union and a light recovery of international markets.

The results for 2005 and estimates for 2006, both positive and negative, are and will be however affected by these factors:

- An increasingly important role taken on by the function of frames in the overall value of the building through its relation to comfortable living and well-being and automation, leading to even greater expansion on the market of high-quality frames.
- Progressive rationalization of industrial production processes and modes of distribution and sale of frames.
- Slowdown of new work starts by construction sites related to major urban requalification interventions, which is cause for concern in the door and window frame sectors as well.
- Market defaults and turbulence resulting from the uncertainty of payments from both public and private tenders and contracts.
- Changes in the distribution chain: while until last year small and medium-sized frame businesses were challenged by the development of organized distribution



aimed at the end users, represented by showrooms or sales outlets in large malls, starting in 2005 we are seeing small and medium-sized frame businesses becoming involved in this distribution model. In the outskirts of large urban centers, and scattered throughout southern Italy, we are witnessing the opening of both single-brand sales outlets of ranges and systems, and of multi-brand sellers aimed at new residential construction and renovations.

- Consolidation of certain sectors that are changing from niches into true market subsegments. Aluminum-wood frames, for example, are the market subsegment that has shown the greatest growth in its share percentage in the last six years: from 5.2% in 1999 to 12.1% of the metal frames market in 2005. The high added quality value, the synergy between design and performance accessories of fixtures have made aluminum-wood frames a successful solution in building renovations aimed at a medium-high target and a key to the success of products made in Italy on international markets. Italian exports of aluminum-wood frames represent 30% of the total production.
- High competitiveness in the industry of frames with low added value by countries where energy and labor costs are lower than the Italian market.



The market of large envelopes and curtain walls

The general overview

Uncsaal estimates that overall curtain walls for an overall total of 490 million euros were made in Italy in 2005, an 8% increase in turnover and 4.5% in terms of square meters on the already positive trend of 2004.

From the economic figure of 490 million euros, we can assign approximately 335 million euros to the "traditional" curtain wall, while the market share for curtain walls with high technological content [structurally glued, double-coated and photovoltaic] totals approximately 155 million euros. These are the two products that have developed the largest market increase.

In the case of curtain walls exports have absorbed approximately 30% of the total production, aimed primarily at the Far East and countries in continental Europe [France, Germany, Benelux, Spain] and North America. Italian curtain wall manufacturers have increased their international market presence [increasingly global], to the point where it may be said that, on average, more than 50% of the turnover of the top 5 Italian manufacturers of curtain walls [also among the leaders in world *rankings*] comes from jobs carried out abroad.

The development of the medium-sized business

With regard to the Italian market, in 2005 we have witnessed a worrisome slowdown in the opening of construction sites for large urban requalification interventions, while business demand for curtain walls has been sustained thanks to the numerous initiatives for commercial real estate development. This has translated into increased demand for small and medium-sized building envelopes, primarily in the outskirts of major cities.

This demand has been primarily covered by the historical core of Italian metal frames, which for the past 4-5 years has guided its strategic choices toward the **building envelope**, in the sense of a complex system of "building coating," leaving the market spaces represented by door and window frames to other craft businesses which have in turn grown into an industrial dimension.

Trends



For 2006 Uncsaal expects and hopes for a continued growth trend in the industry of “innovative” façades [for both large and medium-sized interventions], in light of the increased ability of these products to meet the needs of energy-oriented design. In particular, regarding the segment of innovative curtain walls, the type of building envelope that best meets the new needs for energy savings and reduced pollutant emissions, we estimate a considerable increase in the growth margins for the coming years due to the ever-increasing standardization of the Italian market [public and private] to the quality of European and international demand.



A sector worth 2.5 billion euros

**Metal frames produced
2001-2005**

2001	3,120,000
2002	3,500,000
2003	3,587,500
2004	3,480,000
2005	3,358,200

expressed in number of window units

2001	5,350,000
2002	6,000,000
2003	6,150,000
2004	5,965,500
2005	5,756,700

expressed in square meters

2001	1,600
2002	1,760
2003	1,840
2004	1,875
2005	1,987

expressed in millions of euros

**Curtain walls produced
2001-2005**

	Traditional façades	Innovative façades	Total Curtain Walls
2001	285	77	352
2002	300	82	382
2003	315	105	420
2004	320	133	453
2005	335	155	490

expressed in millions of euros

**The Italian building envelope market
2001-2005**

	Metal frames	Curtain walls	Building envelope
2001	1,600	362	1,962
2002	1,760	382	2,142
2003	1,840	420	2,260
2004	1,875	453	2,328
2005	1,987	490	2,477

expressed in millions of euros