

Prepainted metal

Information letter of ECCA - Groupe français

May 2012

13

Special
Renovation

E D I T O



In 2011 the building renovation market accounted for 56% of the building sector: 69 billion Euros*. Standing at 41 billion Euros, the housing maintenance and renovation market is the main area of spending. As we all know, however important these figures may seem, they are not sufficient.

The housing stock in France is too old, consumes too much energy, offers barely satisfactory comfort to its inhabitants and is not attractive enough to significantly improve either their living environment or well being. For both environmental and economical reasons renovation is being ever more considered.

During this period of French elections, the various political parties have placed accommodation at the heart of their debates. Having decent accommodation is a right... promises are springing up all over the place. They answer the French people's primary concern: their homes.

Unfortunately the majority of these promises are not kept. Build better, quicker and more sustainably, this isn't a promise – it is possible with coil coating metal.

So why isn't it more extensively used for the renovation of France's housing stock?

At the ECCA we are convinced that is it due to lack of knowledge and apprehension.

In this «special renovation» edition we wanted to give two construction companies, Coexia and MYRAL, a chance to voice their views.

Their experience and enthusiasm will undoubtedly throw a new light on the use of coil coating metal for residential renovation.

On behalf of all the ECCA members, I would like to thank them for their help and contribution to this issue.

Mario PALERMO
Président de l'ECCA Groupe Français



Contracting owner: CCI de la VIENNE
Project manager: VAULET Architecture
Entreprise applicatrice: Société SAPAC

ecca
prepaintmetal.eu
groupe français

Special Aluminium Renovation

“ Before thinking about renewable energy, start by insulating ”

Sylvain BONNOT, Président de MYRAL



Mario PALERMO, ECCA : For 25 years exterior thermal insulation for the residential market has been the focal point of MYRAL's business.

Can you give us some background?

Mr Sylvain BONNOT : In 1987, we were one of a handful of entrepreneurs in France who appreciated the full potential this market had to offer. Back then, tax incentives for the thermal improvement of buildings and the Government's Environmental Agreement were a long way off being voted in. But MYRAL was one of the pioneers who were going to test and prove a solution which had already been implemented in Germany. Today our activity is equally divided between houses and apartment blocks.



MP : Why did you choose coil coating metal?

SB : The poor performance of the combined polystyrene + paint coatings combined with the implementation costs and mediocre durability of what the market had to offer drove us to research new, constructive solutions.

The discovery of the first systems using aluminium and polyurethane was a revelation for the company and opened up new aesthetic and efficient perspectives. There were so many possibilities that we had to define major strategic orientation: create our own coil coating aluminium thermal insulation system and develop a production tool which is adapted to our needs.

MP : An incredible challenge!

SB : It certainly was, and progress from the position of an installation company to that of an industrial company is a huge challenge, as were all the technical challenges! Increased thermal efficiency for the systems, mechanical resistance to wrenching, treating specific points... these are the daily challenges facing our teams. The results were beyond our expectations.

MP : What advantages have you found with coil coating metal?

SB : Several: efficiency, economical advantages and aesthetics. We have far greater water and air tightness and there is no rotting on facades which are exposed to the elements. It is even more the case in regions where the climate is more temperate. The resistance and quality of coil coating aluminium finish is incomparable. Thermal paint solutions require 110mm thickness whereas coil

coating aluminium is just 60mm.

Our panels can be up to 14 metres long and are available in the more traditional rendered finish, which corresponds to the highest demand.

Finally, our solution is economical. It is no more expensive than a blind gable. Complex facades may be a little more expensive, but this is largely compensated by an extended life span.

MP : How do you deal with thermal bridges?

SB : Lab theory is ok, but reality is another story because the manufacturing tolerances cause important thermal bridges. It is essential to master air tightness. The challenge is not the thickness of the insulation, but the method used to install it.

MP : You also now offer a 'Matt' aspect

SB : Yes, MYRAL is amongst the first to offer a matt aspect. It is significant progress to be able to offer a mineral, stone and not slightly glossy like PVC. It is more than just a trend, as we can see in the car industry for example, because this matt aspect allows us to achieve a deeper colour, hide uneven surfaces and improve squashing resistance. For architects it offers a real aesthetic difference.

MP : Thank you very much.



Contracting owner: CCI de la VIENNE
Project manager: VAULET Architecture
Entreprise applicatrice: Société SAPAC



House



Contracting owner: SDH
Contractor: S.E.I.



LE CLISSON in NANTES, France
Architect Mr. RAIMBAULT Company: TIJOU

COMPANY DATA

- Founded : 1987
- Turnover : 11 M€
- Number of employees: 50
- 1 transformation line
- Capacity : 170 000 m²
- 1.000 detached houses/year
- 100 apartment buildings/year
- 100 buildings/year



Contracting owner: BATIGERE
Project manager: KLEIN ARCHITECTURE
Entreprise applicatrice : J.L.B Menuiserie

Special Steel Renovation

“ Combining insulation and aesthetics in buildings ”

Mr Gilles HERRIQUET, COEXIA



COMPANY DATA

- Subsidiary of RAMERY Group
- Turnover: 70 M€
- N° employees: 600
- Activity envelope:
 - N° : 250 people
 - 8 agencies in the Nord Pas de Calais region of France

Mario PALERMO, ECCA : Can you tell us about COEXIA within the RAMERY Group, one of the building shell leaders in the Nord Pas de Calais region of France?

Mr Gilles HERRIQUET, COEXIA : Coexia Group is organised into 3 sectors of activity: Energy (heating and bathroom plumbing), trade (framework, plastering, tiling, painting, decoration and interior fit-out) and finally envelope. Since 2007, COEXIA envelope has been the unit specialised in the building envelope.

This branch of the business regroups all the areas of expertise: covering, facade, water and air tightness, green roofing, safety. In order to improve energy efficiency within our buildings we also offer installation and maintenance of solar panels, exterior thermal insulation systems and we are also accredited for the removal of asbestos.

MP : COEXIA has recently delivered a substantial renovation project, can you tell us about it?

GH : Yes, Vilogia (social landlord) and Nortec, their project manager, asked us to carry out the renovation of the 15 story Tour du Tilleul. This project had two main goals: improved thermal and acoustic levels and an aesthetic renovation of the building. The metal used had already been chosen.



Tilleul district



Insulation being fitted



Insulation being fitted





MP : Can you tell us why?

GH : : There were several reasons: technical and aesthetic. On the technical side, coil coating metal is incontestably better than painted polystyrene. Polystyrene based insulations are not very efficient acoustic filters. With coil coating metal any acoustic solution is possible by moving the cladding by 10, 20 or 30cm to get the desired result. Moreover, mineral wool offers far greater thermal protection. The difficulty in the implementation of this product is relative to the knowledge of the installation teams and the care taken in putting in place the insulation before the covering. We used a camera to check the work and thermal bridges.

MP : And what about the aesthetics?

GH : L With coil coating steel the possibilities are numerous compared to render which only offers two possible finishes. The frequency of cladding can offer great variety to the building so it is necessary to use steel sections and panels to make the building different. At the Tour du Tilleul, we used honeycomb panels made from

polycarbonate, strips to give contrast to the facade and trumeaux were re-insulated with bent, galvanised, coil coating steel. Finally, the chromatic possibilities are infinite with samples enabling us to have no appearance problems. The Tour du Tilleul's architect chose a matt finish which gives an exceptional result.

MP : Is this type of construction expensive?

GH : Our client incurred an extra cost due to the complexity of the building and the implementation of the product, however if we consider both the aesthetic quality and energy efficiency achieved, it was not an obstacle. Our client also rightly took into account the sustainability of the investment.

MP : Thank you very much.



The newly renovated Tour du Tilleul



Steel panels



Inspection

Special Renovation

News



L'ECCA ECCA Groupe Français had the opportunity to show their business on Arcelor-Mittal's stand at the Batimat Trade Fair.

Two 45 minute presentations had been produced for professionals. A video showing the use of coil coating metal was projected throughout the duration of the fair and the latest issues of "Métal Prélaqué" (coil coating metal) were available on the stands for visitors' perusal.



Beckers



Becker Industrial Coatings is one of the first companies in the world to obtain ISO 17025 certification

(standards regarding test labs) for their 'sun reflection' process for coatings and painted surfaces.

The company thereby further affirming their 'green' slant on coil coating paints.

EVONIK



The explosion of the German group Evonik's plant (Ruhr region of Germany) last March may well

cause a shortage in the PA - 12 resin used to make the raw materials for the composition of some paints for the coil coating industry. The consequences of this accident could affect the global supply capacity of this product and a stock shortage can be expected.



A new visual identity for the Kynar[®] resins, Arkema's fluorinated polymers range.

Kynar 500[®] FSF[®]

A new logo has been created in order to harmonize Kynar[®]'s numerous logos for Arkema's PVDF fluorinated polymers range.

The rollout of the new Kynar[®] identity coincides with the successful startup of a new PVDF production plant at Arkema's Changshu site in China. Arkema is now the only producer with PVDF facilities on three continents - Europe, North America and Asia - well positioned to serve regional customers.

The Kynar[®] brand, a hallmark of excellence for decades

Since first introduced in 1965, Kynar[®] resins have become the reference for weatherable architectural coatings.

Arkema was the first to develop a fluoro-surfactant-free PVDF grade for coatings, Kynar 500[®] FSF[®]. Kynar[®] based coatings now protect thousands of buildings around the world.

TATA STEEL

New year. New horizons.

Myriad has changed its brand name and become Tata Steel. Myriad, as part of the Corus Group plc, joined the Tata Steel Limited group in 2007. This resulted in one of the biggest metal groups in the world, with solid global presence. Tata Steel was one of the first companies to introduce metallic structures in Asia over one hundred years ago and their history is long and paved with success, as is that of Myriad and its predecessors.

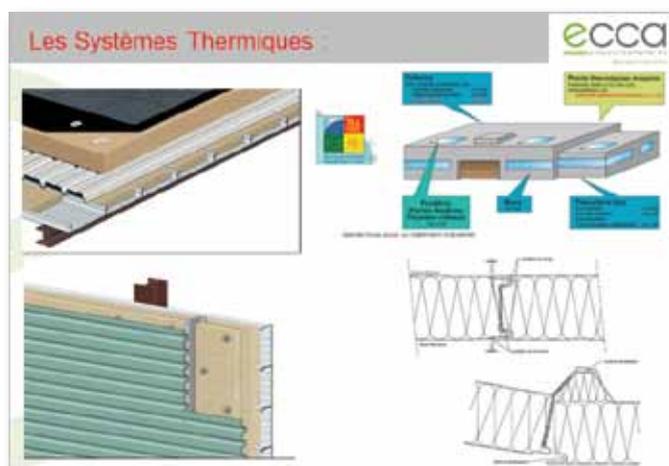
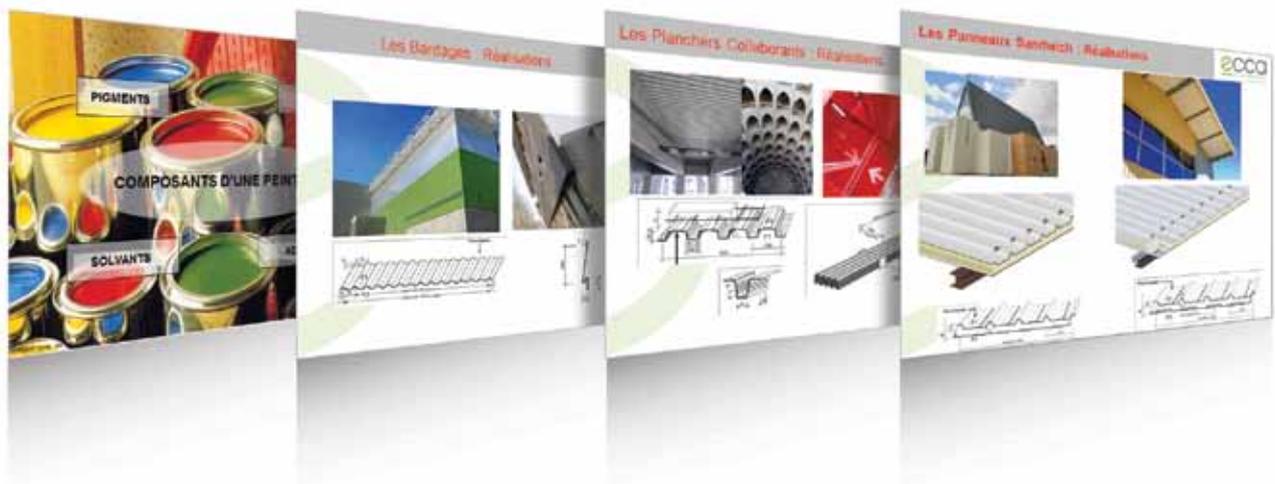
Discovering coil coating

ECCA France and their communication commission offer a training module to both students and professionals called « Discovering Coil Coating ». It is a thorough insight into the use of coil coating's industrial and construction uses in order to fully understand its technical and creative potential.

The module includes the following topics: presentation of coil coating, steel and aluminium supports, coil coating, characteristics and efficiency, colours and shades, techniques for use and assembly, coil coated metal and the environment, applications, normalization.

If you would like to join one of the training courses organised by ECCA members, or if you would like us to send you this module, then please contact:

Alain FRANCOIS, Administrative Officer
alain.francois@ecca.asso.fr



BUILDING A LOW-ENERGY HOUSE?

Today, although the darker shades are the most popular, there is also high demand for shades that absorb the sun's rays. Reflective paint reduces heat on cladding which in turn reduces indoor temperature by 5 to 10°C*, improving comfort in the warmer summer months.

*in the case of non insulated coverings.

LOOKING FOR THE LATEST INNOVATIONS?

Discover all the innovations in coil coating metal: condensation regulating coatings, insulating panels, acoustic solutions, reflective paints...

WANT TO SAVE MONEY?

The option of a coil coating metal roof will provide you with substantial savings on the total cost of your house. You will save money on transport and installation, make energy savings and savings on the structure of the building.

Discover exactly how to get better value for money in your buildings.

WANT TO PROTECT THE ENVIRONMENT?

Metal is an environmentally friendly material and remains so throughout its life cycle. Limited pollution (noise and other) on building sites Metal construction is listed in the building category known as dry construction: no water, no mud, no dust.

A key point for High Environmental Quality building projects.

COMMENDABLE EXAMPLES

A slide show is available with many examples to help you appreciate the architectural possibilities for coil coating metal: low pitch roofs, original forms, wide range of colours...

www.toiture-innovante.fr is designed for architects and project managers who are looking for new roofing solutions for houses



The major players in the coil coating metal field have contributed to this web site, which offers unique and ingenious solutions to designers in order to insulate, to save money, to protect the environment, to make roofs more attractive and to speed up the construction process, for both new builds and renovation projects.

Discover the innovative roofs:

www.toiture-innovante.fr

For more information:

> Ask ECCA members:

AKZO NOBEL - ALCOA - AP2E - ARCELORMITTAL - ARKEMA
BECKERS - CHEMETALL - HENKEL - MIRALU - NLMK Strasbourg
- NOVACEL - PPG Industrials Coatings - TATA STEEL Maubeuge
- VALSPAR

> Or contact ECCA



ECCA Groupe Français
17, rue Hamelin
75783 PARIS CEDEX 16
contacts@ecca.asso.fr