



ThermaSmart PRO

Insulating the future, from cradle to cradle



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#### 01. WE, THERMAFLEX



# Minimize the waste of energy, maximize the use of renewables

Existing and developing societies are in need of sustainable solutions for energy and water. Together with our stakeholders, we help build systems for future generations. In everything we do, we are inspired by nature. As it is always systemic, smart and efficient in its solutions.

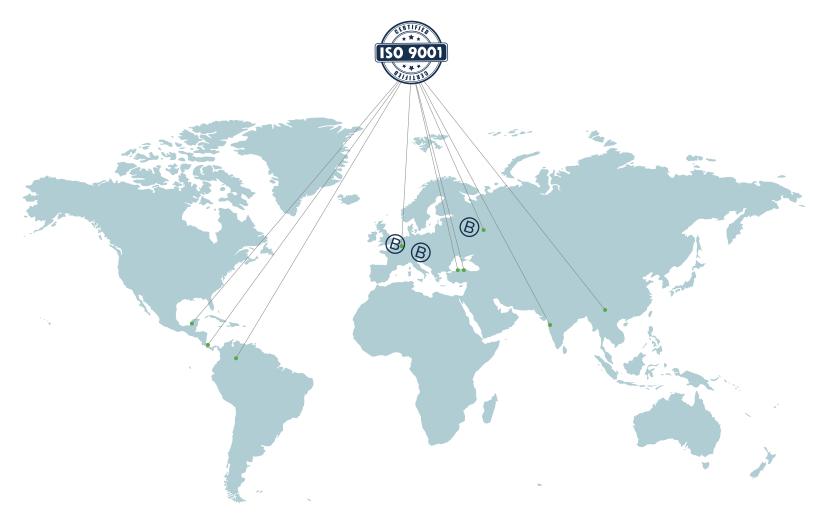
1919
Wilhelmus Baars learns
to harness the virtues of
wood in a carpentry shop

1976
Thermaflex founded by
Leendert Baars, based on
polyolefine technology

1989 International expansion under the 3rd generation, Gerrit-Jan Baars 1999 First process for **pre-insulating pipes** developed 2005 Start of **polybutene** pipe production

1951 Wilhelmus Baars innovates with **cork**, nature's finest insulating technology 1983 **Direct extrusion** of polyolefines developed 1990 As the first company worldwide, Thermaflex switches completely to (H)CFC-free production 2003 Flexalen 600, the first flexible pre-insulated system worldwide developed 2014
Proven sustainability with
Cradle-to-Cradle certification
and Environmental Product
Declarations for various ranges

#### 01. WE, THERMAFLEX





#### ISO 9001:2008

6 regions in the Thermaflex group have achieved ISO 9001 quality management certification for continuous quality improvements in its customer focus, managment, and processes.

#### ISO 14001:2004

On top of that, both Thermaflex production locations in Europe have also achieved ISO 14001 certification through effective environmental management systems.



Thermaflex North-West Europe, Central Europe, and North-East Europe are Certified B Corporations, using business to bring social and environmental change. In 2015, the 1st was honored as 'Best for the Environment', scoring in the top 10% of all certified B Corps in this impact area. For this we were recognized by Forbes.

#### 01. WE, THERMAFLEX

# Our Philosophy

# Taking care of energy and the environment

Energy and water are a necessity in the built environment. They are a basic right for everyone.

We have the knowledge and experience to provide systems to distribute these vital elements efficiently, and smartly. In a manner that is convincingly different and will serve society far into the future.

Today Thermaflex is a source of energy to many people. From the team that is running its every day operations to the business partners and customers with whom we share values and create smart energy saving solutions.



# Our Inspiration

We are inspired by nature in the way that it provides protection without a depletion of resources. Always in full symbiotic harmony with its surroundings, creating a circular state of existence.

Our designs and systems contribute to the circular economy; they are recyclable and serve the transition to renewable energy.

Responsible processes demand a minimum of resources for maximum benefit.

At Thermaflex we like to think in solutions rather than in products. Our research and development aims at the specific needs of our customers and end-users. We build close relationships with our stakeholders, creating optimal solutions in cooperation and co-creation with each other.

#### 02. OUR CONTRIBUTION

# Let's join forces to take care of...

#### Our resources

The growing scarcity of resources is one of the major challenges in the world today. We believe a solution can be found in the **circular economy.** 

Our long term ambition is to reclaim all **materials** and close the loop. This requires a constant drive for improving efficiency, longevity and waste reduction for our systems as well as in our processes.

Our contribution to **water** scarcity and quality lies in delivering leakage-free systems for drinking water and/or sanitation purposes, and reducing and reusing water in our production facilities.



## Our ecosystems

Taking care of our ecosystems, spanning generations, drives us to work together in symbiotic harmony. We aim for maximum benefit for all our stakeholders.

We develop maintenance-free and easy-to-install systems to connect demand for cooling & heating with supply, while lowering energy costs and contributing to green **communities**.

We can only be successful in our mission by working together with like-minded partners throughout the complete **value chain.** 

#### Our climate

Our major aim is to reduce CO2 emissions by maximizing the use of renewables and minimize the waste of energy.

Renewable resources are often locally available, reducing dependency on external suppliers.

We facilitate the use of renewables in our operations wherever possible.

We are continuously improving the **energy performance** of our systems and solutions. In our own organization, in-house programs result in higher energy efficiency and operational excellence.

#### Residential



Building (for) the future: smart and sustainable homes



Single Family Houses
Strike home with efficient
convenience



Apartment Blocks
Sustainable building: a better
future for all



Rural Communities
Think local, heat local



Attached Houses
Bringing homes and heat together

## Industry



Levers for change – energy efficiency as a key resource



Shipbuilding Industry
Set sail for tomorrow with smart and sustainable maritime solutions



Food Industry
Nourishing ingredients for high
standard food production

# Government & Municipality



Energy and sustainable development: an open door



Schools & Universities
Greater comfort for greater
learning

240,000

mWh of renewable energy enabled in 2015 which prevents the burning of

 $5,\!120 \text{truckloads of coal}$ 











Our Impact

and saved

350,000 tons of CO2 in 2015 That's the equivalent absorbed by 17,500,000 trees

++++++++++++++

# Commercial



Future-proofing your business: a sweet deal



Data Centers

Cool data = Safe data



Supermarkets Keep it fresh



Office Buildings
A comfortable workplace works



Shopping malls
Healthy shopping: wallet- friendly,
and eco-friendly solutions

# Hospitality



Harmonizing comfort, capital and climate



Hotels Where comfort meets savings



Thermal Centers
Hot rocks in a cool solution

A healthy and comfortable indoor environment: a basic living right...

Did you know...?



That 95% of our electricity purchased in Europe comes from renewable energy sources?

#### 04. APPLICATIONS



For a detailed overview of all our applications go to www.thermaflex.com

#### 05. SOLUTIONS, SYSTEMS & COMPONENTS



Renovation
Closing the gap... and beyond



Expansion
Sustaining comfort for an expanding world



New construction

Breaking valuable new ground



Cooling & Chilled Water Insulation
Premium condensation
prevention with added bonus



Heating Insulation
Save your comfort,
comfort your savings



Tubes
A total insulation solution



Self-Adhesive Tubes Get smart, at full speed ahead



In coil

Now quality comes in a coil



Sheet We got you covered



Prefabricated Parts
Pre-built for success



Tools & Accessories Assembly made easy

#### 06. CERTIFICATIONS

## Above and beyond industry standards

Choosing Thermaflex solutions ensures that you will comply in every respect with industry standards...

#### Securing LEED & BREEAM credits



ThermaSmart PRO has been developed in coordination with leading green building benchmarks. It sweeps most facets of design, construction, operation and maintenance according to LEED and BREEAM criteria - the two frontrunners in green building certification. You can check out the full categorical breakdown in the knowledge center of our website.

#### REACH, VOC and RoHS compliant



We fully commit ourselves to the protection of human health and environment. All Thermaflex components are risk-free and safe to use under any conditions in conformity with the Registration, Evaluation, Authorisation and Restriction of Chemicals by EU regulation (REACH), the Volatile Organic Compounds list (VOC), as well as the Restriction of Hazardous Substances (RoHS).

#### **Excellent fire classification**



- DIN 4102 B1
- SBI BL, s1, d0
- SBI C, s2, d0
- IMO FTP Code res. MSC.61(67) smoke generation according to ISO 5659-2 (1994)
- ASTM E 84 (in progress)
- UL 94

... and even going above and beyond them, giving you a competitive advantage and a means to differentiate

#### Cradle to Cradle Certified™ Bronze



Our commitment to healthy environments and making scarce resources meet future demands has led us to achieve a 25% Cradle to Cradle Certified<sup>TM</sup> assortment. For Thermasmart PRO, we achieved Cradle to Cradle Certified<sup>TM</sup> Bronze, the world's only in technical insulation.

#### **Environmental Product Declarations (EPDs)**



Thermaflex provides transparency in all aspects of sustainability; whether it concerns production, material choice or product features. That is why we've adopted a foremost international standard that independently verifies and registers a transparent and comparable life-cycle story about the environmental impact of our components.

#### **Environmentally-friendly production**



The production of our insulation happens in our fully ISO 14001:2004 certified production sites. In our commitment to minimize environmental impact, this foremost certification ensures the use of effective environmental management systems for a responsible production.

For an overview of our certifications check out our knowledge centre at www.thermaflex.com

#### 07. THERMASMART PRO

# ThermaSmart PRO

#### Insulating the future, from cradle to cradle

ThermaSmart PRO is a revolution in insulation, tackling all those challenges of efficient and sustainable building design. Our full range of components offers a complete insulation solution for domestic hot and cold water applications, securing safety, high performance and durability for decades to come.









# Hassle-free, and headache-free performance

ThermaSmart PRO is a range of efficient, and durable insulation components from high quality polyolefine foam. Its flexibility makes for a quick and easy, yet full-proof and aesthetic installation - even in the most difficult space conditions. The completely closed cell structure of the Polyolyfine material of ThermaSmart PRO minimizes energy loss, prevents vapor diffusion, which makes for a condensation-free and thus corrosion-free solution throughout its life cycle. On top of that, it also has a high resistance to mechanical damage, wide temperature ranges, and water permeation throughout the test of time.

#### No-compromise solution

ThermaSmart PRO excells in the latest European standards for fire protection, while ensuring minimal smoke production. As a safe and healthy material, it minimizes the production of toxic gases and flaming droplets. It is environmentally friendly, both in manufacture and in use. As the first, and only Cradle to Cradle Certified<sup>TM</sup> technical insulation, it also fully complies with our vision of a circular economy, and is 100% recyclable upon reclaim. Check out the Cradle to Cradle Certified<sup>TM</sup> Material Health certificate and Environmental Product Declarations (EPDs) in our knowledge center!



#### 08. GENERAL FEATURES & MATERIAL HEALTH

# General features



- Cradle to Cradle Certified™ Bronze
- 100% recyclable
- Environmental Product Declaration (EPD) available



- Excellent flame extinguishing properties
- See component ranges for detailed fire class properties



- Health
- Produced without (H)CFC
- Complies to REACH
- Complies to VOC (Volatile organic components)
- Complies to RoHS (Restriction of Hazardous Substances)



- Cradle to Cradle Certified™ Bronze
- CE system 1 certified (including 3rd party control)
- Bureau Veritas approved for shipbuilding
- Approved for Airbus



- Insulation
- Robust, yet flexible thermoplastic foam
- Excellent insulation properties



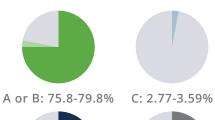
- Water
- Closed cell structure
- Excellent water vapor

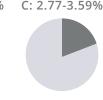
# Material Health Bronze

Percentage of homogeneous materials assessed by weight

81-100%

#### Assessment ratings by weight

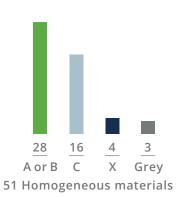




X: 9.37% GREY: 0-19%

% Homogeneous materials

#### **Product optimization**



A or B	Optimal
C	Acceptable for use
X	Targeted for phase out
GREY	Unknown identity

- Cradle to Cradle Certified™ Banned List compliant
- ✓ Material Health optimization strategy developed

# ThermaSmart PRO Tubes

#### A total insulation solution

ThermaSmart PRO Tube combines high performance, flexibility and maximum savings. It has been developed to provide a comfortable fit for wallet, environment and peace of mind in a quick and easy solution.









## PROfessional design

ThermaSmart PRO tube insulation is an advanced insulation material made of high grade thermoplastic foam, ideal for heating, cooling and potable water applications. It prevents energy losses in pipes, minimizes flow noise and protects against mechanical damage. ThermaSmart PRO tube prevents the condensation typically found in domestic water or cooling pipes, ensuring corrosion-free, and thus headache-free systems. Key in its design is that the excellent properties are retained throughout the component life cycle. As a front runner in sustainable solutions, all our ThermaSmart Pro components are Cradle to Cradle Certified™ and carry both a Material Health certificate, as well as an Environmental Product Declaration - check it out in our knowledge center!

#### Universal application

ThermaSmart PRO tubes can be used for pre-insulation or in retrofit applications with Thermaflex glue, or easier yet, with a heat tool to make homogeneous Prefabricated bands and T-pieces. We offer installers the full package with energy savings calculation tools, toolkits and trainings to ensure a full-proof, and future-proof solution.



- Cradle to Cradle Certified™ Bronze Product Certificate
- Cradle to Cradle Certified<sup>TM</sup> Bronze Material Health Certificate
- CE system 1 certified (including 3rd party control)
- Wheelmark certification for shipbuilding



- SBI BL, s1, d0
- IMO FTP Code res. MSC.61(67) smoke generation (ISO 5659-2)
- UL 94
- (ASTM E84 in progress)



• UV resistance tested per ISO 4895-2 Xenon-arc



- Insulation
- Lambda 0.038 W/mK at 40°C (EN 12664)
- Lambda 0.036 W/mK at 23°C (EN 12664)
- Lambda 0.034 W/mK at 0°C (EN 12664)



- Water vapor resistance M-value ≥ 10.000 (EN 13469)
- 0.1 kg/m2 (EN 1609)
- 0.013 Perm Inch (ASTM E94)



Service **Temperature** 

- Wide service temperature range
- Maximum 95°C (EN 14707)
- Minimum -80°C Maximum 95°C (DMTA)
- (ASTM C534 in progress)



- **Availabilities**
- Standard length: 2m
- Available in wall thickness: 6-30 mm
- Available in diameters: 6-114 mm
- Color: dark grey

#### 10. TUBES SELF-ADHESIVE

# ThermaSmart PRO tubes Self-Adhesive

#### Get smart, at full speed ahead

From the wide range of ThermaSmart PRO, our tube insulation with self-adhesive seam is for those who have no time to waste! A quick pull of the adhesive band before sticking the sides together will secure each flexible and recyclable meter of insulation in just a few seconds, so that you can start saving straight away.







#### A safe bet

Fast-track your smart energy transition to a secure and energy-efficient solution with minimal costs of installation, and above all, energy. As a front runner in sustainable solutions, all our ThermaSmart PRO are Cradle to Cradle Certified™ products and carry a Environmental Product Declaration certificate.



- Cradle to Cradle Certified™ Bronze Product Certificate
- Cradle to Cradle Certified™ Bronze Material Health Certificate
- CE system 1 certified (including 3rd party control)
- Wheelmark certification for shipbuilding



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Service Temperature

- Wide service temperature range
- Maximum 95°C (EN 14707)
- Minimum -80°C Maximum 95°C (DMTA)
- (ASTM C534 in progress)



- Standard length: 2m
- Available in wall thickness: 9-13 mm
- Available in diameters: 6 60mm
- Color: dark grey

#### 11. IN COIL

# ThermaSmart PRO in coil

#### Now quality comes in a coil

Coiled ThermaSmart PRO is the perfect complement to two meter pipe sections. This highly-flexible insulation is especially effective when ease of transport and installation is an issue since it is available in a relatively small package.









#### As versatile as it is convenient

ThermaSmart PRO tube insulation in coil is an advanced insulation material made of thermoplastic foam that is stronger than other traditional elastomers. Its closed cell structure remains flexible within the temperature range of -80 °C to + 95 °C. It also provides excellent insulation properties and meets stringent fire classifications. ThermaSmart PRO tubes can be used in heating, ventilation, air conditioning and cooling applications. It can also be used for pre-insulation.

#### Help for installers

Thermaflex offers installers energy savings calculation tools that save energy, optimize insulation thickness and prevent condensation. Tools and trainings can also be available in your region, contact us to find out more!



- Cradle to Cradle Certified™ Bronze Product Certificate
- Cradle to Cradle Certified™ Bronze Material Health Certificate
- CE system 1 certified (including 3rd party control)
- Wheelmark certification for shipbuilding



- SBI BL. s1. d0
- IMO FTP Code res. MSC.61(67) smoke generation (ISO 5659-2)
- UL 94
- (ASTM E84 in progress)



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- Lambda 0.038 W/mK at 40°C (EN 12664)
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- Lambda 0.034 W/mK at 0°C (EN 12664)



- 0.1 kg/m2 (EN 1609)
- 0.013 Perm Inch (ASTM E94)



- Service Temperature
- Wide service temperature range
- Maximum 95°C (EN 14707)
- Minimum -80°C Maximum 95°C (DMTA)
- (ASTM C534 in progress)



- Standard length: 2m
- Available in wall thickness: 6-30 mm
- Available in diameters: 6-114 mm
- Color: dark grey

#### 12. SHEET

# ThermaSmart PRO Sheet

#### We got you covered

ThermaSmart PRO sheet is the material of choice for owners and installers across the globe who seek excellent and durable performance combined with quick and easy installation. Its unique health and sustainable properties make it the go-to product for anyone thinking ahead of time – something none of your stakeholders will ever regret.







# Play it safe

ThermaSmart PRO sheet meets today's most stringent demands when it comes to the efficient insulation of large surface areas. The wide temperature ranges and excellent insulation value make it ideal for minimizing energy losses in Heating, Ventilation, Cooling and Refrigeration over building lifetime. For cooling, the unparalleled water vapor diffusion barrier eliminates the risk of condensation and subsequent corrosion or material deterioration headaches.

The excellent mechanical strengths measured in tear—and puncture resistance make ThermaSmart PRO also the ideal protection for your pipes, fittings, valves, compressors, heat exchangers, etc. ThermaSmart PRO also ensures an optimal protection of human health. Its high fire safety standards and minimal smoke production make sure building occupants can safely leave their building, free of any health hazards.



- Cradle to Cradle Certified™ Bronze Product Certificate
- Cradle to Cradle Certified™ Bronze Material Health Certificate
- CE system 1 certified (including 3rd party control)
- Wheelmark certification for shipbuilding



- SBI BL, s1, d0
- IMO FTP Code res. MSC.61(67) smoke generation (ISO 5659-2)
- UL 94
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• UV resistance tested per ISO 4895-2 Xenon-arc



- Insulation
- Lambda 0.038 W/mK at 40°C (EN 12664)
- Lambda 0.036 W/mK at 23°C (EN 12664)
- Lambda 0.034 W/mK at 0°C (EN 12664)



- Water
- Water vapor resistance M-value ≥ 10.000 (EN 13469)
- 0.1 kg/m2 (EN 1609)
- 0.013 Perm Inch (ASTM E94)



- Service Temperature
- Wide service temperature range
- Maximum 95°C (EN 14707)
- Minimum -80°C Maximum 95°C (DMTA)
- (ASTM C534 in progress)



Available in thickness:

7.5 mm - 10 mm - 13 mm - 19 mm - 25 mm - 30 mm

• Available in width:

50 cm - 60 cm - 100 cm - 120 cm

- Color: dark grey
- Variations upon request

#### 13. TOOLS & ACCESSORIES

# ThermaSmart PRO Tools & Accessories

#### Assembly made easy

When you choose the right insulation for your project, you take the first step toward success. The next step is correct assembly. It's important to trim and glue your work for achieving the best results. Uneven edges can lead to large losses of both energy and money. So it pays to master both knife and glue skills.









# The right accessories

To make installation even easier we also offer a range of accessories to simplify the assembly process. Our installation toolbox includes tools that let you easily perform all installation tasks. These tools include liners, dies, clips, template, glue, brushes, knives and more. Our accessories ensure trouble-free performance for many years with a minimum of energy loss.

#### Advantages:

- A complete selection of proven accessories
- Ease of installation to save time
- Warranty
- Safe to use
- Attractive aesthetics
- High quality tools
- Complete toolboxes



#### The right cut

Precisely cut edges are the key to proper installation of tubes on your pipes. A Thermaflex knife gives you a precise, reliable and fast cut without jagged edges. We build our knife with a special handle shape to ensure a safe and easy cut.



#### The right glue

Gluing the cut edges is an equally important step in installation since it directly affects durability and trouble-free operation. Thermaflex glues dry quickly and joins the two cut edges perfectly. Once dry they also exhibit self-extinguishing properties.



#### The right look

Have it look great! For exterior applications, the Thermapaint can be applied. The standard color is white but different colors can be provided upon request. The extreme elasticity of the paint will avoid cracks.



Protect it from the sun! The Thermapaint is a perfect protection against UV radiations. Ideal for exterior applications.



#### The pipe hangers

To make installation even easier we also offer a range of accessories to simplify the assembly process. Our installation toolbox includes tools that let you easily perform all installation tasks. These tools include liners, dies, clips, template, glue, brushes, knives and more. Our accessories ensure trouble-free performance for many years with a minimum of energy loss.

#### 14. PREFABRICATED PARTS

# ThermaSmart PRO Prefabricated Parts

#### Pre-built for success

Proper installation of insulation forms the basis of a heating system that functions properly. While protection of simple and continuous installations is relatively straightforward, it can be complicated by the need to protect a system full of arches and branches. Experienced installers may not have problems with such environments, but time on the job will still be increased. That's why we offer preformed ThermaSmart PRO parts. They're manufactured to bring you ease of assembly and excellent insulation properties, even in difficult settings.









## Built for speed

ThermaSmart PRO polyolefine elbows and tees bring you fast, professional results on pipe bends, branches and other places where insulation is difficult to install. Prefabricated to provide easy and efficient assembly, they reduce the number of thermal bridges to ensure maximum system efficiency with minimal cost of operation.

#### Help for installers

Thermaflex offers installers energy savings calculation tools, complete toolboxes and trainings on request.



- Cradle to Cradle Certified™ Bronze Product Certificate
- Cradle to Cradle Certified™ Bronze Material Health Certificate
- CE system 1 certified (including 3rd party control)
- Wheelmark certification for shipbuilding



- SBI B<sub>L</sub> s1. d0
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- Water
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Service Temperature

- Wide service temperature range
- Maximum 95°C (EN 14707)
- Minimum -80°C Maximum 95°C (DMTA)
- (ASTM C534 in progress)



- **Availabilities**
- Available in wall thickness: 6-30 mm
- Available in diameters: 6-114 mm
- Color: dark grey

#### 15. CONNECTIONS

# Solidifying your system

#### Craftsmanship in the forefront

Connections are often the most vulnerable and time-consuming part of an insulation system. So when it comes to efficiently insulating an installation, the type of connections should be carefully considered. To tailor to all possible needs, we offer 3 main connection solutions to seal off your system: from your basic glues, to factory prefabricated connections, and a heat plate tool to prefab-it-yourself at the speed of light.

# Rating:

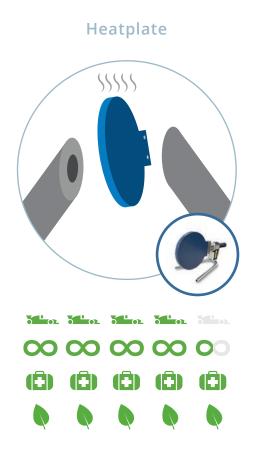
Ease & time savings

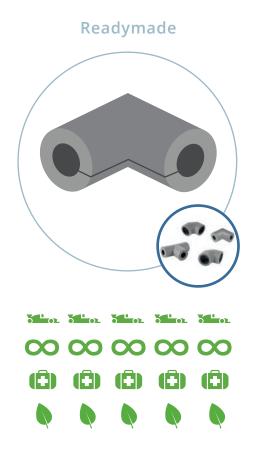
Reliability

Health

Sustainability

# Glue Glue





#### 16. CASE STUDIES



Stadium FC Spartak in Moscow



#### □ STATISTICS

46,000 fans

0,000 m<sup>2</sup> f sheet insulation used

40,000 MWth energy saved yearly

Park Hyatt in Goa



#### □ STATISTICS

21,900,000 l of chilled water saved per yea

14,000 m

of ThermaSmart PRO insulation

**♀** Covalia in Mexico



#### □ STATISTICS

12 levels for living, working, shopping and dining

4 levels for parking

900 m²

5,222 m²

of bars, arcade rooms and pools

• Westin Playa Bonita in Panama



#### □ STATISTICS

520 rooms

23 floors

6 auditoriums

4 restaurant

supplied with sustainable cooling and heating, chilled and hot potable water

0 incidents

recorded since project completio

#### 16. CASE STUDIES

# Covalia, San Luis Potosi

Mexico

#### Serving diverse, high-end needs in an all-in-one solution

The city of San Luis Potosi is one of the most advanced regions in the Mexico. Its central location and large industrial economy harnesses considerable potential for economic growth and development. The Covalia complex rhymes perfectly with these ambitions, bringing together numerous and distinct users in an iconic real estate development project in the city. A smart and innovative energy solution was key to meet such high and diverse demands.

The Covalia state-of-the-art building complex sought to secure an integrated energy solution for its wide variety of end-users, the first of its kind in the state of San Luis Potosi. In order to meet the different needs in such an energy-intensive facility, engineering an efficient and sustainable solution was crucial.

#### Goals

Serving to be a leading example in the industry, the goal for the Covalia project developers was clear – to find an innovative, efficient and sustainable solution which positively contributes to a healthy indoor environment at the highest level of comfort and well-being for its diverse users. It was to become one of the most popular addresses for living, work and play, attracting both the local community as well as visitors. Considering the hot and humid climate in the region, a high level of energy-efficiency at minimal maintenance throughout building lifetime was desired. Thermaflex stood out as the ideal solution provider for this cutting edge project.

#### Details

In order to keep up a healthy and clean indoor environment, an efficient and sustainable level of heating, cooling and ventilation – using healthy materials – is key. In close cooperation with the real estate developer, Thermaflex designed and developed a complete solution for Covalia's energy infrastructure with a smart network of pre-insulated Flexalen pipes, next to 2.3 km of ThermaSmart PRO tubes and 200 m<sup>2</sup> of ThermaSmart PRO for the existing installations.

#### For a detailed overview of all our case studies, go to www.thermaflex.com

#### Results

All 12 stories of living, working, shopping and dining are now perfectly equipped to fulfill the high and diverse energy demands in a perfectly clean and healthy indoor environment. The widespread needs and conditions for the multitude of different users are met at a flawless performance to this day. Our solution guarantees this performance throughout the lifetime of the building. The Covalia and its exclusive mix of services developed as an attractive spot for the local community, numerous tourists and business travelers today.









#### 17. LET'S CONNECT



# Our process

Frame	Design	Realize	Support	Evaluate	Reclaim
Define project goals	Engineer a smart solution	The spadework	Commit- ment to smooth realization	Ensure benefit of ownership	Close the loop with material second life

#### A customized approach

No two projects are the same. But after seeing thousands of them around the world, we know what makes them a sustainable success. Your specific projects goals come first and act as the 'yardstick' throughout the project. Our very best engineers design the best possible solution and calculate optimal routing and dimensioning; fast implementation and lifecycle performance are always on the top of their minds. Once full alignment on all aspects of the project is reached, it's time for implementation.

Our tools, training and on-site support ensure a smooth implementation of the project. We are only happy when you are. All that's left for users and owners is to enjoy affordable and headache-free comfort for generations to come. After that, safe and efficient reclaim secures the renewed purpose of our carefully selected materials.

#### Your very own thermal energy expert

Team up today with our highly dynamic, and professional team of experts and engineers. Our solutions have proven successful in any climate, situation or working conditions. Locally, our teams of professionals across the globe are ready to cater for your needs, from Panama to Siberia.

# What goals do you want to achieve?

Cost control

Operational efficiency Installation ease and speed

**Energy saving** 

Environmental capital

Life expectancy





#### THERMAFLEX INTERNATIONAL

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