



**DESIGNED FOR VISIONARIES
BUILD FOR NATURE**

clean

Colorbond[®]
THERMATECH[®]



CLEAN COLORBOND® STEEL

TAKES YOUR ARCHITECTURAL DREAMS TO THE SKIES.

The development of Clean COLORBOND® steel with Thermatech® Technology reflects BlueScope's enduring qualities - innovative, superior, cutting-edge and trend leading. With our Thermatech® solar reflectance technology, we are helping to create a future that is comfortable not just for people, but for the environment too. Combined with Clean COLORBOND® steel's renowned durability, colour retention and flexibility, you now have the power to shape the landscape to suit both your architectural vision and conscience.

**CLIMATE
CONTROL
STARTS HERE**

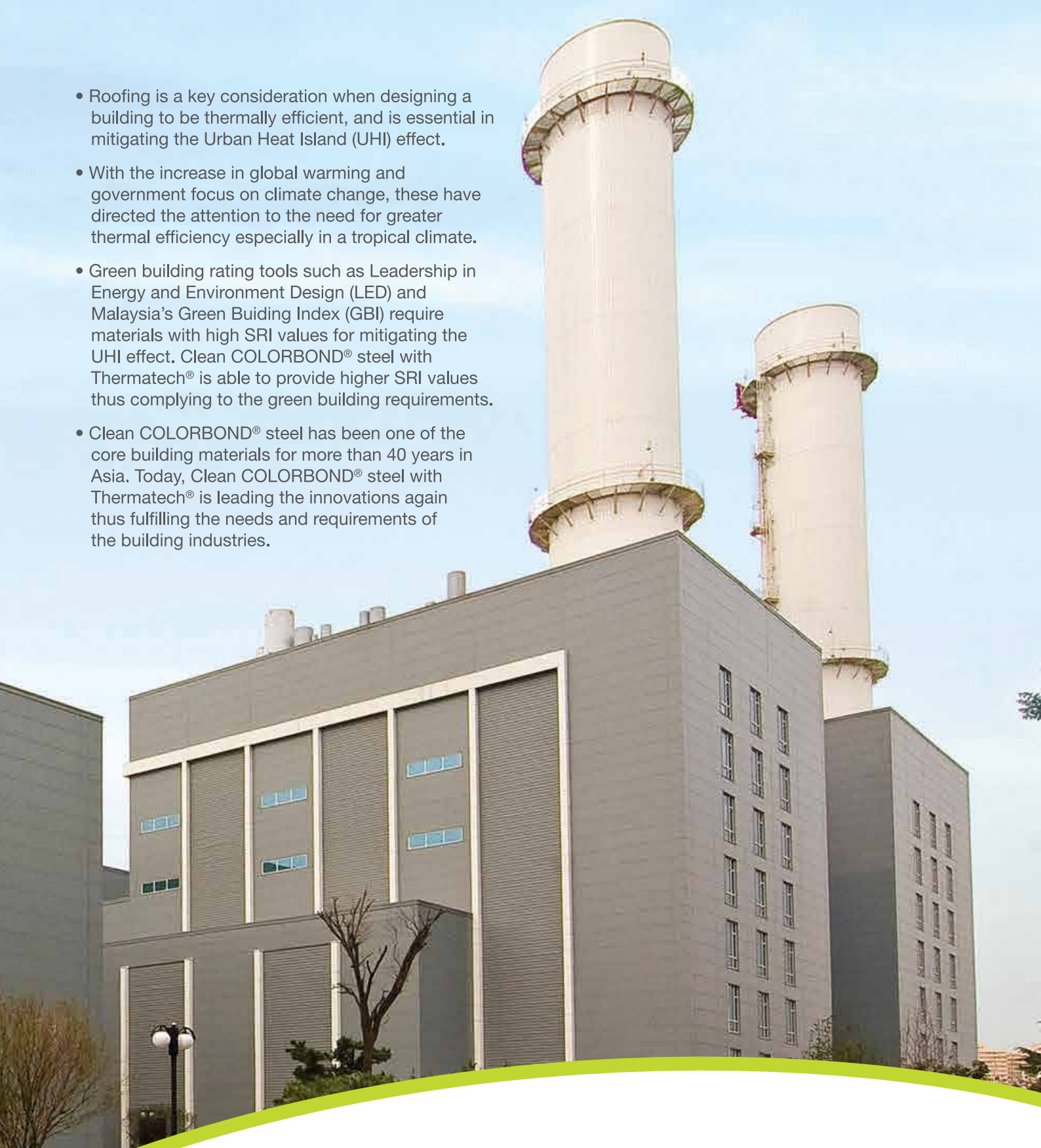


WHAT IS THERMATECH® SOLAR REFLECTANCE TECHNOLOGY?

- Thermatech® solar reflectance technology is incorporated into Clean Colorbond® steel roofing material to reduce roof temperature by absorbing less heat from the sun. In other words, it's a more reflective roofing material.
- Solar Reflectance Index (SRI) is a numerical value used to represent the solar reflectance of a material. The SRI for standard black is 0 and a standard white is 100. Higher SRI values indicate higher reflectance and lower roof temperature.
- Thermatech® technology optimizes the thermal performance of every colour in the standard Clean COLORBOND® steel without changing their appearance therefore consumes less energy for air-conditioning and helps to mitigate the Urban Heat Island (UHI) effect.



- Roofing is a key consideration when designing a building to be thermally efficient, and is essential in mitigating the Urban Heat Island (UHI) effect.
- With the increase in global warming and government focus on climate change, these have directed the attention to the need for greater thermal efficiency especially in a tropical climate.
- Green building rating tools such as Leadership in Energy and Environment Design (LEED) and Malaysia's Green Building Index (GBI) require materials with high SRI values for mitigating the UHI effect. Clean COLORBOND® steel with Thermatech® is able to provide higher SRI values thus complying to the green building requirements.
- Clean COLORBOND® steel has been one of the core building materials for more than 40 years in Asia. Today, Clean COLORBOND® steel with Thermatech® is leading the innovations again thus fulfilling the needs and requirements of the building industries.

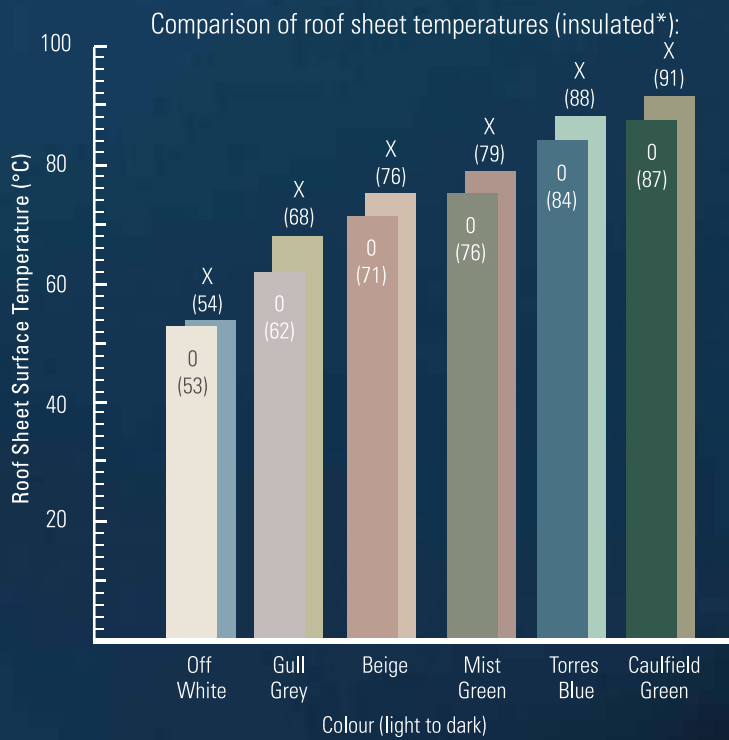


WHY IS
THERMATECH®
IMPORTANT?



LOWER ENERGY CONSUMPTION FOR THE SAME COMFORT

- Thermatech® solar reflectance technology acts as an added insulation in hot weather, making it easier for air-conditioning to keep buildings cool.
- In moderate to hot climates, compared to roofing material of similar colour with lower solar reflectance, Clean COLORBOND® steel can reduce annual cooling energy consumption by up to 15%*.
* Depending on level of insulation, colour, building shape and function.
- Clean COLORBOND® steel with Thermatech® technology reduces peak roof temperature by up to 6°C*, depending on the colour.
* Depending on level of insulation, colour, building shape and function.
- Greater comfort while using less energy helps to reduce cost and is friendlier to the environment.



0 - Clean COLORBOND® steel
 X - Standard pre-painted steel

*Assume 1000W/sq.m.;
 Exterior Temperature = 36°C, no wind
 Thermal emittance = 0.85;
 100mm bulk insulation

The temperature of the roof sheet is lowered due to the Thermatech® technology in Clean COLORBOND® steel. This in turn cuts down the heat radiation into the building, making the interior of the building cooler.





MORE OF EVERYTHING
PEOPLE LOVE ABOUT **CLEAN**
COLORBOND® STEEL



- Now, with the inclusion of Thermatech® solar reflectance technology, Clean COLORBOND® steel gives the building industry even more than what it wants. A wider choice of thermally efficient colours and even greater durability because of reduced heat stress on the entire roofing system.
- Clean COLORBOND® steel is backed by BlueScope's material warranty* against perforation by corrosion for up to 25 years, warranty against flake and peel for up to 15 years, warranty against excessive colour fading for up to 10 years and warranty against discoloration by dirt staining for up to 5 years.

- Elegant colour, design versatility, lightweight strength and durability are just some of the features that have made Clean COLORBOND® steel a favourite to architects, developers, builders, designers and the public alike.
- Corrosion resistance performance is a key focus for Clean COLORBOND® steel with AZ150 coating which is able to provide stronger and durable resistance against corrosion as compared to conventional pre-painted steel. Research has shown that the AZ150 coating class is able to provide up to 4 times additional lifespan as compared to conventional galvanized coating with similar coating thickness. Quality from BlueScope gives the assurance of minimum AZ150 coatings using our ZINCALUME® steel as the base material.

* Warranty terms and conditions apply.



CONTEMPORARY LIVING WITH **CLEAN COLORBOND® STEEL**

Modern . Beautiful . Lasting

YEAR-ROUND **CLIMATE CONTROL**

- Designing and building homes to be comfortable all year round can be a challenge with many considerations, including aspect, cross-ventilation, insulation, climate and more.
- Clean COLORBOND® steel roof not only reduces the amount of solar radiation absorbed, but is also very effective at re-radiating heat. With the addition of Thermatech® solar reflectance technology, darker coloured Clean COLORBOND® steel products also absorb less energy, creating the same advantages of a cooler roof and a cooler building.
- Thermal comfort is maintained by the dirt resistance property in Clean COLORBOND® steel. The solar reflectance of roofing sheets will be influenced by the amount of dirt staining. Therefore retaining a clean appearance is very important for maximizing the cooling effect of roofing sheets.

Green accreditation for the environment

Environmental sustainability is a continuous effort and commitment from all of us. We ensure our customers receive the highest standard in both quality and efficiency with the environment's best interest at heart. There is no better way to demonstrate our commitment than receiving green accreditation from renowned independent bodies.

Our coated steel products are certified with SIRIM Eco-Label for Coated Flat Steel Products Criteria by SIRIM QAS International, a member of the Global Ecolabelling Network (GEN); and Singapore Green Building Product by Singapore Green Building Council (SGBC), a non-profit organisation with a concerted private-public sector partnership to achieve a world-class and sustainable built-environment in Singapore

The SIRIM Eco-Label certification identifies a product's overall environment impact and the communication of its environmental information to consumers and business. Through this scheme, the product has undergone independent evaluation, and certified by SIRIM on its environment performance against criteria which include the composition of raw materials used, hazardous substances composition, waste and energy management in the entire manufacturing operation cycle.

Our products are listed in the Green Building Products and Services Directory at Green Pages Malaysia (www.greendirectory.com); MyHIJAU Directory (greendirectory.my); and SGBC Directory of Certified Products (www.sgbc.sg). These directories guide green consultants in their selection decision to identify preferred green products.

clean

Colorbond®

THERMATECH® STEEL Colour Chart

Offering you a vibrant selection to match your most prestigious designs.



 SOLAR REFLECTANCE INDEX (SRI)¹

Note: 1. Solar Reflectance Index (SRI) – is calculated using ASTM E1980 and Medium Convection Coefficient (12) value reported

This data is approximate values only – may vary based on paint formulation and/or metallic coating thickness

The Clean COLORBOND® steel colours shown in the brochure have been reproduced to represent actual product colours as accurately as possible. However, we recommend you to check your chosen colour against actual sample of the product before purchasing, as varying light conditions and limitations of the printing process affect colour tones.

For product identification and originality, please check the reverse side of the coil for the following branding text.

Clean COLORBOND (P) steel made by BlueScope 16.18 01.APR.13 II



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This brochure supersedes all previous version.