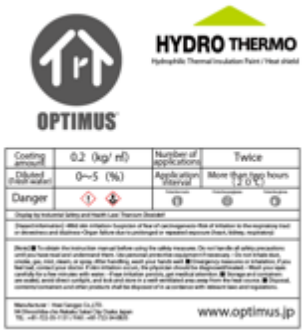
OPTIMUS PAINTING INSTRUCTION

For maximum insulation effect (with filler layer)

Paint with roller

1	Surface treatment	Be sure to clean, make even, and clean the base material, remove rust, dirt, algae, mold, etc., and clean the surface before applying a base treatment suitable for the base material..
2	Cleaning	If dust or dirt adheres to the base, the adhesive strength will not be secured and problems such as peeling of the coating film and blistering will occur, so be sure to clean it. When applying to wallpaper, etc., clean the base with water before applying.
3	CMS primer	● **Application quantity：100g/sqm** **（Dilution：0～10%）**    If the primer is sucked in too much, apply the primer again.

<table>
<tr><td>4</td><td>Mixing
and stirring</td><td>Before painting, be sure to stir with an electric stirrer until the material is uniform.
The aggregate may float.
  </td></tr>
<tr><td>5</td><td>Insulation
Filler</td><td>● Application quantity：thick 600g/sqm
（Dilution：0%）
Painting interval:
2 hours
  </td></tr>
<tr><td>6</td><td>Mixing
and stirring</td><td>Before painting, be sure to stir with an electric stirrer until the material is uniform.
The aggregate may float.</td></tr>
<tr><td>7</td><td>1st Layer of
HYDRO
THERMO</td><td>● Application quantity：200g/sqm
（Dilution：0～5%）
Painting interval:
1 hour</td></tr>
</table>



Regarding the painting method, do not only apply in a certain direction, but be sure to pass it vertically and horizontally. (The special aggregate will be biased and the finish will be poor.)
Regarding the coating amount, please strictly adhere to the standard coating amount.

Painting interval:
1 hour

8	2nd Layer of HYDRO THERMO	● **Application quantity：200g/sqm** **（Dilution：0～5%）** Regarding the painting method, do not only apply in a certain direction, but be sure to pass it vertically and horizontally. (The special aggregate will be biased and the finish will be poor.) Regarding the coating amount, please strictly adhere to the standard coating amount.

Precautions for application

1. To avoid cracks ① Strictly adhere to the dilution rate stated in the construction specifications. (If you apply more than the standard dilution rate, the shrinkage will occur when the paint film dries, causing surface cracks.) ② Do not apply more than the amount specified in the application guideline. (Paint hardens from the surface, so if the amount applied exceeds the standard amount, water evaporates and breaks through the paint film, leading to surface cracks.) ③ The undercoat layer specified in the construction specifications is Be sure to apply it. (If there is no undercoat layer, when the topcoat layer dries and hardens, the adhesion to the base is weak and internal stress increases, leading to surface cracks on the topcoat surface.) ④ For panel bases such as ALC that move a lot, joint Fill the area with a coating material that has a large movement, such as urethane sealing, and use it as a cushioning material. 2. Issues regarding paint film peeling ① If the undercoat layer (primer) is strongly absorbed, reapply the undercoat layer. (If the primer is strongly sucked in, it will not adhere well to the topcoat, causing it to peel off. (The type of base is plasterboard)) ② Do not leave too much space between the undercoat layers. (If the interval is too wide, dirt and dust will adhere to the undercoat layer, causing poor adhesion with the topcoat. Also, if the interval is too wide, the activity of the undercoat layer itself will decrease, causing poor adhesion.) ③ If the base is mortar or concrete, remove not only dirt and dust but also eflo laitance. (Eflo-Laitance itself is an alkali crystal, which causes peeling because it cannot be impregnated with primer and cannot secure adhesion with mortar or concrete.) ④ Use the coating material specified by the manufacturer. (Using materials from other manufacturers in combination may cause problems with adhesive strength and durability, so use materials specified by the manufacturer.) ⑤ If a solvent-based primer was used, use a hydro Since Thermo is a water-based paint, there is a high possibility that defects such as poor adhesion or repelling may occur, so it is removed with a sander, a water-based primer is applied, and then Hydro Thermo is applied. ⑥ When repainting, check the adhesion to the base paint film in advance. 3. Regarding color separation ① Strictly adhere to the dilution rate stated in the construction specifications. (If the dilution rate is too high, separation will

occur within the paint film due to the difference in specific gravity of the pigment, resulting in color separation.) ② Be sure to stir the paint before applying. 4. Avoid construction at low temperatures, high temperatures, and high humidity (environmental conditions of 5°C or lower and 35°C or higher and humidity 85% or higher). Avoid applying under these environmental conditions as the development of coating film strength will be delayed. This may cause cases where the coating film performance is not exhibited or poor adhesion. (If water evaporates at a low temperature and high humidity, the water will not evaporate and the formation of a paint film will be significantly delayed. Also, if the temperature is high, roller marks or brush marks may appear, impairing the aesthetic appearance.) 5. Bases that cannot be painted ① If the base is painted with fluorine coating or silicone coating, the adhesion cannot be ensured (it will not adhere), so avoid using hydrothermo paint. ② Avoid painting the PP (polypropylene) base as HydroThermo will not adhere to it. ③Avoid weak bases. 6. Regarding construction ① Be sure to stir for 1 to 2 minutes using a manual stirrer. If you have time, stir again for 1 to 2 minutes before use. ② Remove dirt such as dirt, mold, moss, and oil from the surface to be painted, as well as any paint that is starting to peel off, to keep the surface clean. In addition, construction will be postponed in case of rain. (Even if the weather is sunny, construction will be suspended if it rapidly becomes cloudy.) ③ Provide good ventilation during and after painting. (The formation of the paint film will be delayed, making it difficult to proceed smoothly to the next process. Also, condensation will occur, causing poor adhesion, whitening, and stains.) ④ Since it is a water-based paint, do not use a solvent when diluting it. (Paint separation and drying problems may occur.) ⑤ Circulate air using a blower. (Particularly when the humidity is high, the drying of the paint film will be extremely slow. Also, avoid blowing air directly onto the painted surface.) ⑥ If the paint film gets dirty after it dries, do not wipe it off with thinner, etc. Wash with neutral detergent. ⑦ Prepare water-based painting tools such as roller brushes. ⑧ Rinse any paint on your tools or hands with water as soon as possible after use.

Please paint roof for maximum effect!

Room temperature comparison before and after painting

Roof surface temperature		Room temperature	
when not applied to roof	when applied to roof	when not applied to roof	when applied to roof
54.2℃ ▶	32.8℃	42℃ ▶	30℃

Comparing OPTIMUS-coated and uncoated roofs

Two adjacent factories, one painted with OPTIMUS and one without.