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Eco-friendly Insulation Specialized Company



Technology development is  
trust that we show to our consumers.

New Technology of Insulation Materials,  
Choungwoo Industry will lead.

WORLD'S BEST INSULATION

[www.superlon.co.kr](http://www.superlon.co.kr)





greeting



Technology development is  
trust that we show to our consumers.

WORLD'S BEST INSULATION 

Choungwoo Industry Co., Ltd. has launched two corporate brands-

SuperLon  and SureLon  under the motto of "New Technology of Insulation Materials".

We are specialized in producing a variety of insulation materials ranging from industrial and constructional insulation materials- fireproof insulation, low-emissivity insulation and sound proof insulation for communal residential building to eco-friendly home insulation- insulating wallpaper and foam blocks.

Choungwoo Industry Co., Ltd. will do its best for high product quality through constant research and technology development. Thank you.

Choungwoo Industry Co., Ltd. All the staff and administration.

Company history

- 2018
  - Overseas brand SureLon, launched 
  - Sound proof insulation, SuperLon, patented 
- 2017
  - Choungwoo Industry R & D Research Center, established
- 2016
  - Semi-fireproof insulation performance, approved
  - Semi-fireproof insulation production line, installed
- 2015
  - Cross-linkable polyethylene (PE) foam production line and compression line, installed
  - Additional establishment of Choungwoo Industrial Corporation
  - 2nd factory of Choungwoo Industry, established
- 2013
  - Certified as a venture company
- 2012
  - Low emissivity insulation production line, installed
  - 1st factory of Choungwoo Industry, established
- 2011
  - Quality assurance Q mark, acquired
- 2010
  - ISO 9001 and ISO 14001 certification, acquired
- 2009
  - Unique brand Superon, launched 
  - Heat reflective insulation production line installed
  - Company name changed to Choungwoo Industry
- 2007
  - Daewoo I & C (Insulation & Construction), established



# 01 Cross-linkable polyethylene (PE) foam

**Cross-linkable polyethylene foam** is a type of closed-cell foam excellent in heat insulation, shock-absorbing property, sound proof and chemical resistance. It is particularly light with high performance and widely used in various industries such as construction, civil engineering, and housewares.



## Basic property table

Category	Unit	Reference value		Remark
Operating Temperature Range	℃	70	120	KS M 3862
Tensile Strength	N/cm²	14.7 above	24.5 above	
Thickness Shrinkage	%	(70±5℃) 7 below	(120±5℃) 7 below	
Absorbency	g/100cm²	0.01 below		

## Manufacturing Standards

Category	Unit	Reference value	Remark
Density	g/cm <sup>2</sup>	0.188 ~ 0.025	5 ~ 40 times
Production thickness	mm	3 ~ 15	allowable error±10%
Product width	mm	1,000 ~ 2,300	

## Applications

### 01 Construction



Refrigerant piping



Piping insulation



Roof insulation



Duct insulation



Building insulation



Sound insulation



Elastic sound absorbing material



Floor insulation

### 02 Automotive Sector



Door panel



Side panel



Gasket



Air duct

### 03 Housewares



Insulated wallpaper



Floor mat



Fruit package

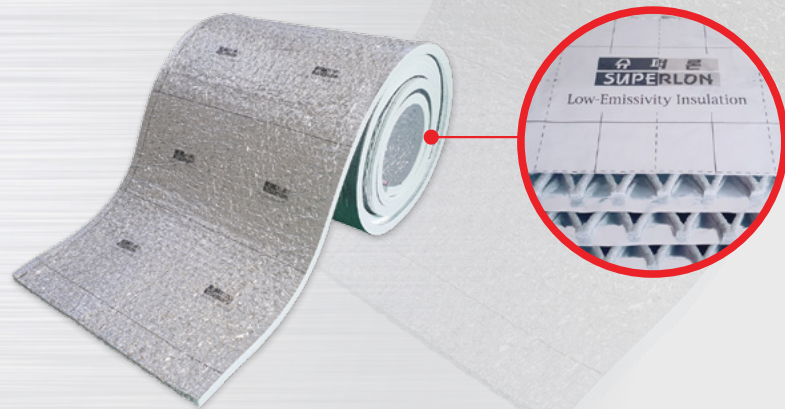


Life jacket



## 02 Low radiation insulation 슈퍼론 SUPERLON

**Low-emissivity insulation SuperLon** blocks up to 97% of radiation, using aluminum plate and multi layered polyethylene (PE) honeycomb to maximize thermal insulation performance .



**Performance Certification**  
Certified by <Energy Saving Design Criteria of Construction> of the Ministry of Land, Transport and Transport

**Eco-friendliness**  
Certified as the best grade of eco-friendly building materials

**Economics**  
Thinner than bulk insulation, maximizing the utility of building space

**Construct-ability**  
Flexible material easy to install and airtight construction effectively blocking heat and cold bridge

**Durability**  
Moisture-proof aluminum film with anti-oxidation and anti-corrosion coating maintains insulation performance

**Aluminium plate**  
The first radiation block

**Cell (air layer)**  
closed air layer secondly blocks the conductive and convective heat

### Product Specification

Configuration	AL film + Polyethylene (PE) foam / Perforation + AL film
Spec	40T (M * 10M / ROLL)
	50T (M * 8M / ROLL)
	60T (M * 7M / ROLL)
	80T (40T * double layers)
	100T (50T * double layers)
	120T (60T * double layers)

Allowable error  $\pm$  5% in Polyethylene (PE) Thickness

### Applications

**External insulation**

After insulation installation, finish with marble, panel siding and masonry to minimize heat loss.

**Roof insulation**

Airtight construction applicable to complex roof structure and easy to block a large amount of radiant heat.

**Thermal Insulation**

- The indoor side of the con'c surface applicable to minimize heat loss.
- Installing on the wall and floor of the extended balcony, it has a good effect to prevent condensation.

**Agricultural Greenhouse**

Install it on the house side and rooftop window to improve the thermal efficiency.

**Floor insulation**

Factory floor / indoor floor applicable and able to block moisture and increase thermal efficiency.

### Construction details

**Stone**

**Masonry**

**Panel**



## 03 Semi-fireproof insulation 슈퍼론 SUPERLON

**Safe semi-fireproof insulation SuperLon** maintains the existing low-emissivity performance while excellent in heat resistance and less likely to generate toxic gas in the fire. Also it is a high-efficiency insulation material, compared to bulk insulation with poor heat performance; its flexible material facilitates easy and airtight installation, and has excellent heat-bridging and cold blocking performance.



### Product Specification

Configuration	AL fiber film + Flame retardant polyethylene (PE) foam / Perforation + AL film
Spec	4OT (M * 10M / ROLL) 5OT (M * 8M / ROLL) 6OT (M * 7M / ROLL) 8OT (4OT * double layers) 10OT (5OT * double layers) 12OT (6OT * double layers)

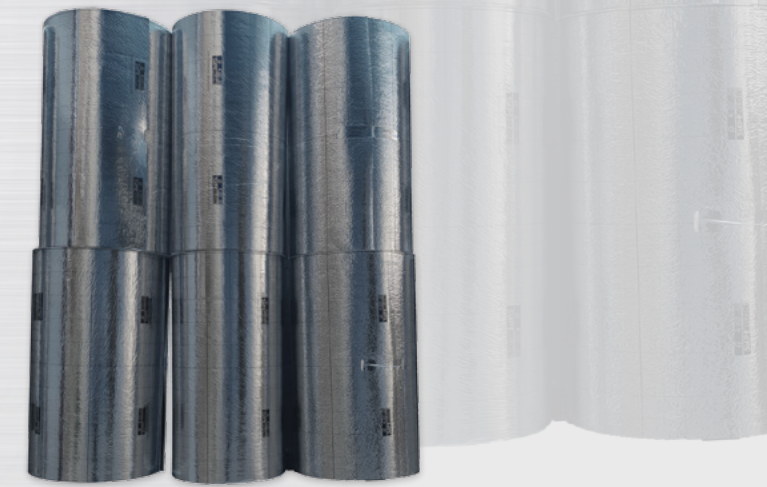
Allowable error  $\pm$  5% in Polyethylene (PE) Thickness

〈Mandatory requirements of fireproof insulation on exterior wall (Enforcement Decree of the Building No. 26542)〉

- Commercial Building of the total area over 2,000㎡
- Six-story building or building higher than 22 meters

## 04 Heat-reflective insulation 슈퍼론 SUPERLON

**Heat-reflective insulation SuperLon** complements the disadvantages of existing bulk insulation such as performance degradation by physical properties, inconvenient handling and installation and economic efficiency; it is multi-functional multi-layer reflective insulation including pure aluminum foil, polyester and polyethylene layer for optimum insulation.



### Product features

#### ▶ Blocking heat loss

Surface reflectance of ALUMINUM FOIL is more than 90%, blocking radiation from the outside in summer, and it is effective in reducing heating cost, blocking thermal loss with low-emissivity (0.03ε) in winter.

#### ▶ Construction-ability

A single installation up to 60T reduces labor cost and shortens construction time.

#### ▶ Sealability

Airtight installation is applicable to areas such as column, beam and corner where bulk insulation cannot be installable.

#### ▶ Breakage prevention

A soft product prevents breakage during installation and handling and maintains a clean site.

#### ▶ Moisture resistance

Polyethylene foam is moisture-proof to prevent deterioration of insulation performance.

#### ▶ Operability

Easy to cut and transport; no insulation damage when handling with the finish materials

### Product Specification

Configuration	AL film + polyester (long fiber non woven fabric) + cross-linkable polyethylene (PE) foam	
Thickness	Length	Remark
5T	45m/Roll	Flat plate Type
6T	50m/Roll	
10T	25m/Roll	
13T	25m/Roll	
20T	20m/Roll	Flat plate + Perforated Type
30T	10m/Roll	
Options	double sided AL, copper foil AL, adhesive type	



## 07 Sound-proof insulation for communal residential building

슈퍼론  
SUPERLON

Sound-proof insulation, SuperLon is made of cross-linkable polyethylene with module Product specifications to minimize the sound impact between floors; the soft rolled type is easy to be installed and optimized for standard floor structure.

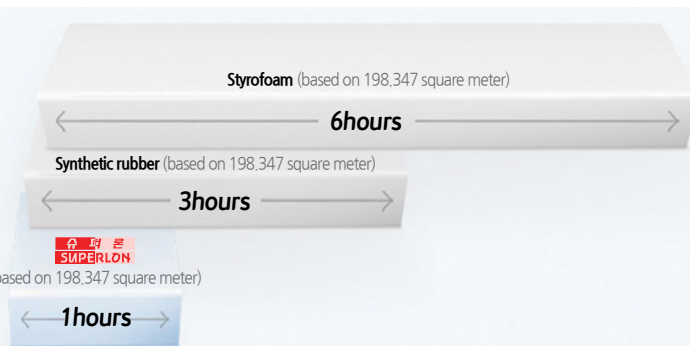


### Content with criteria of sound installation between floors

Roll-type SuperLon easy to install and zero noise between floors

**“We’ve saved the construction time this much”**

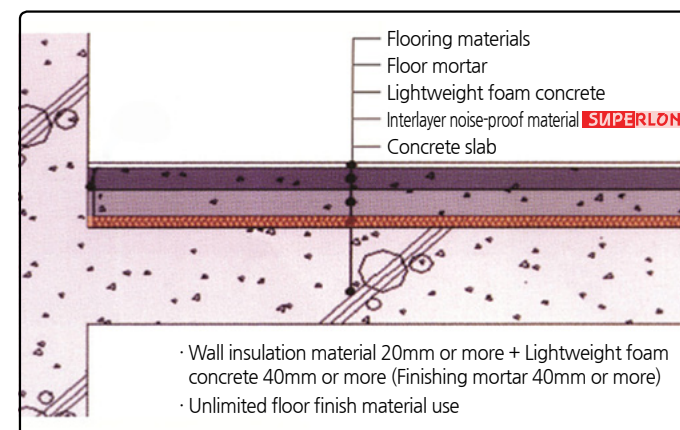
(based on 198,347 square meter)



### Product Specification

Spec			Remarks
Thickness	Width	Length	
20T	1M	15M / Roll	ROLL TYPE
30T	1M	12M / Roll	

### Construction method



### Installation process



### Product structure

Product material	Cross-linkable polyethylene 20mm, 30mm
Product Specification	20m * 1M * 15M / 30mm * 1M * 12M

### Product features

#### ▶ Sound insulation and sound absorption

It has excellent sound insulation and sound absorption, using 3-dimensional network structure material of foam ethylene that can reduce noise; it has great effect on light and heavy sound by a wide frequency range of applications.

#### ▶ Elasticity

It has perfect resilience against load.

#### ▶ Insulation and non-absorbency

It has a low thermal conductivity due to its independent foam structure; it has excellent insulation effect and its non-absorbent material does not deteriorate insulation performance in the long term.

#### ▶ Waterproof

The product is waterproof with concrete sealing and seamless foam layer between the upper and lower part for airtight installation and no foam crack.

#### ▶ Durability

No chemical change to the surface and no physical change by temperature.

#### ▶ Convenient installation

The product standardization makes installation convenient at the site and unnecessary to separate; it has excellent elasticity and hence durability during and after installation.

#### ▶ Environment friendliness

No environmental problem during construction or dismantlement for no use of adhesive.

#### ▶ Stability

It has high safety for low dynamic deformation characteristics such as residual deformation by fixed load, falling object, or movement of resident.

#### ▶ Adhesiveness

Its flexible material is fully adhered to the floor.

### Certificates and test reports



[20T, 30T/ Density out dynamic elastic module]

ISO 9001



Quality Management Certificate

Quality Assurance Certificate

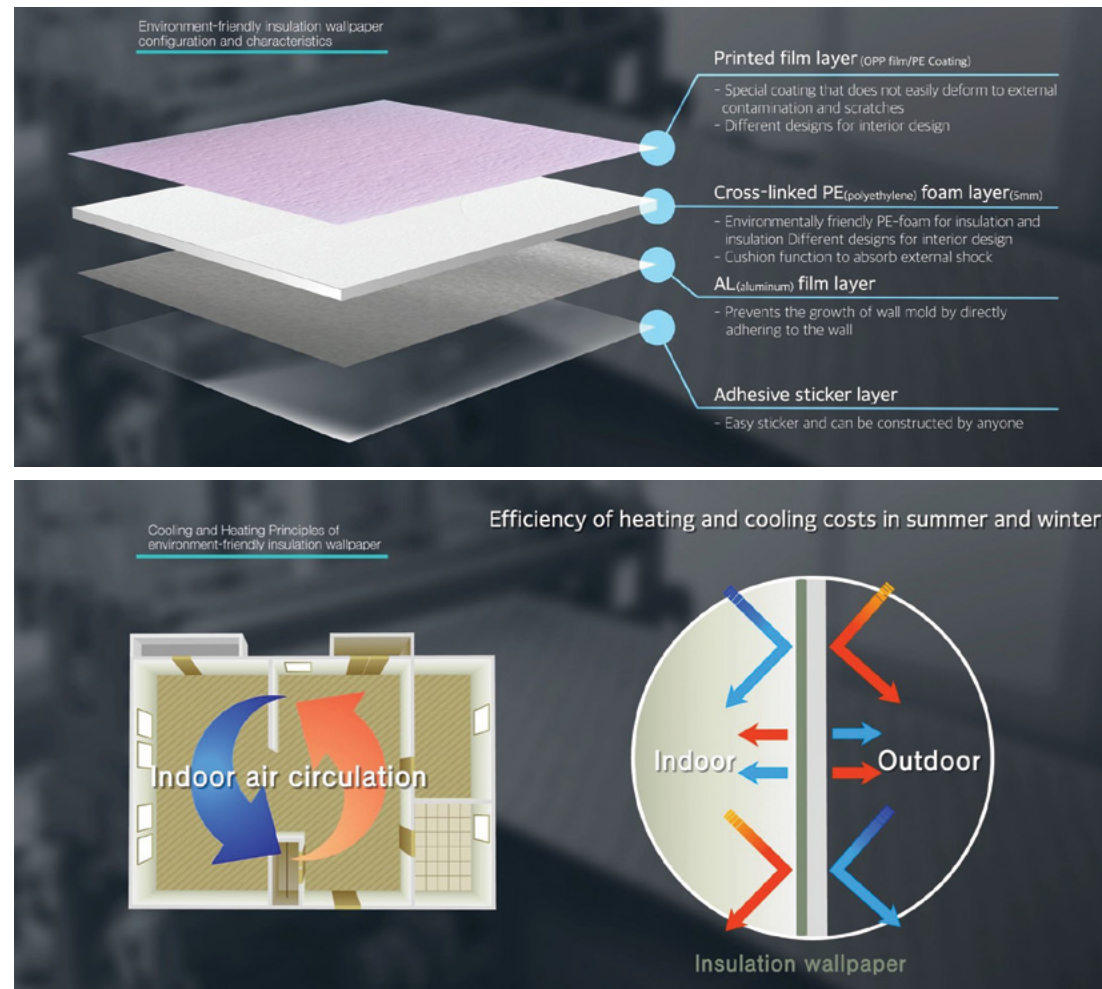
Venture Business Certificate



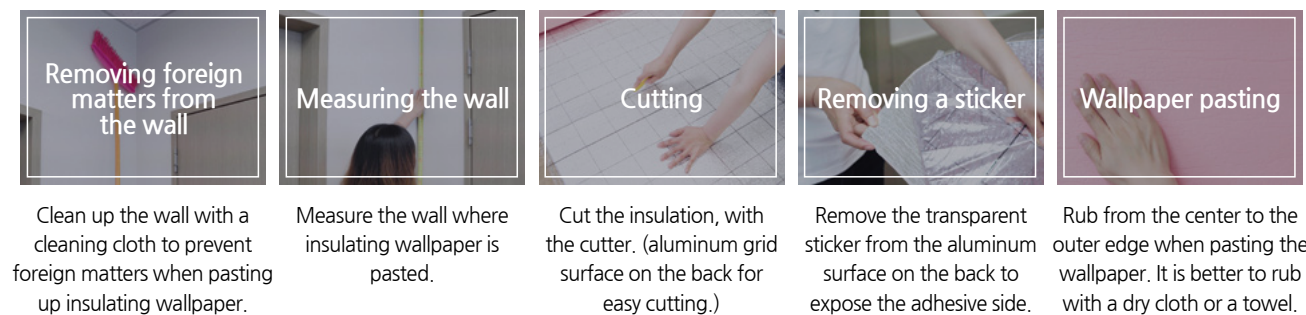
## 06 Eco-friendly insulated wallpaper

**Insulated wallpaper SuperLon** is produced by heat fusion method of cross-linkable polyethylene (PE) foam excellent in heat insulation and film designed to meet customers demand; it has interior effect, thermal insulation effect and mold prevention.

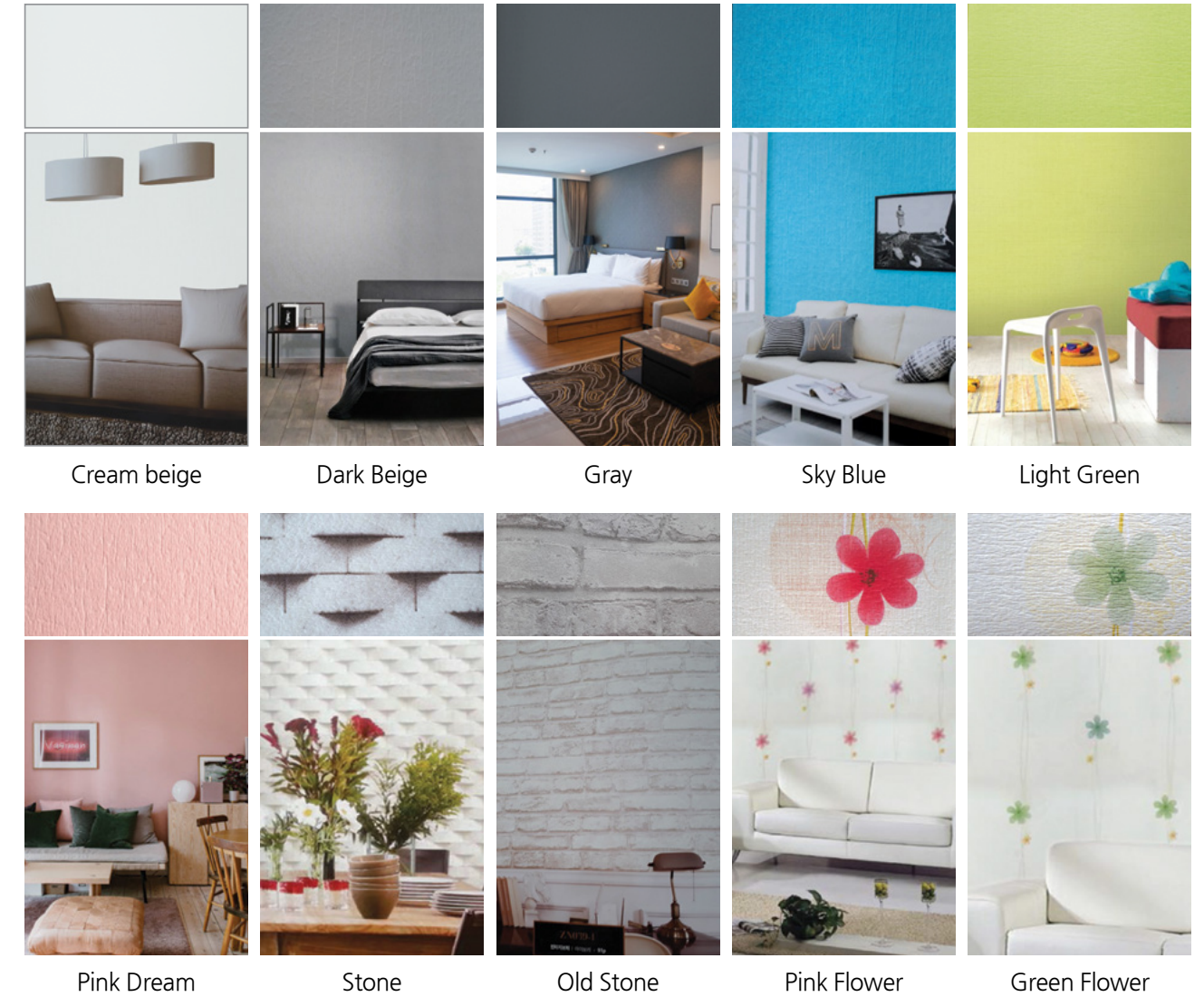
### Product Configuration and Features



### Construction method



### Product design (All designs customizable for different clients needs!)



### Eco-friendly Insulation Test Report





## 07 Condensation-resistant insulation for communal residential building

슈퍼론  
SUPERLON

**Condensation-proof insulation SuperLon** is a spherical and closed-celled foam material with low thermal conductive and non-absorbent to prevent condensation. In the long term period, it can reduce condensation thanks to moisture permeation and absorption. Also, it has excellent chemical resistance and durability, not being deformed or broken even after long period of time.



### Features

Category	Basic property	Remark
Materials	Polyethylene	Cross-linkable polyethylene
Density	0.003g/cm <sup>2</sup>	-
Absorption rate	0.00006g/cm <sup>2</sup>	The higher the absorption rate, the lower the adiabatic performance and the durability by time
Thermal Conductivity (KS range)	0.043W/m.k below	KSM 3862
Thermal Conductivity	0.034W/m.k	KSL 9016-'1995 (Measurement of heat transfer to a flat plate)
Bending Strength	No damage by external impact	Strength up to breakage due to external impact
Tensile Strength (KS range)	14.7N/cm <sup>2</sup> above	Strength to withstand pulling force
Tensile Strength	20N/cm <sup>2</sup>	KSM3014-'2001
Advantages	Cost reduction minimized loss, convenient installation and saving working hours	

### Examples of Installation



### Certificates and test reports



## 08 CI / BI introduction

### CI (Corporate Identity) Introduction

**SYMBOL - The first character of GO (go ahead)**

The corporate logo of Choungwoo Industry represents the progressive entrepreneurship with G, the first letter of go, in red for passion. It symbolizes our challenge and advancement.

### Choungwoo Industry

(Korean)

친환경 단열재 전문기업

(주) 청우산업  
CHOONGWOO INDUSTRY CO.,LTD

(English)

Eco-friendly Insulation Specialized Company

CHOONGWOO INDUSTRY CO.,LTD

### BI (Brand Identity) Introduction

The corporate brand SuperLon of Choungwoo Industry represents the best insulation, a combination word of super and Lon (insulation material), visualizing the shape of insulation material.

### RED (Main Color)

### BLUE

### GREEN