

www.visiongnv.com



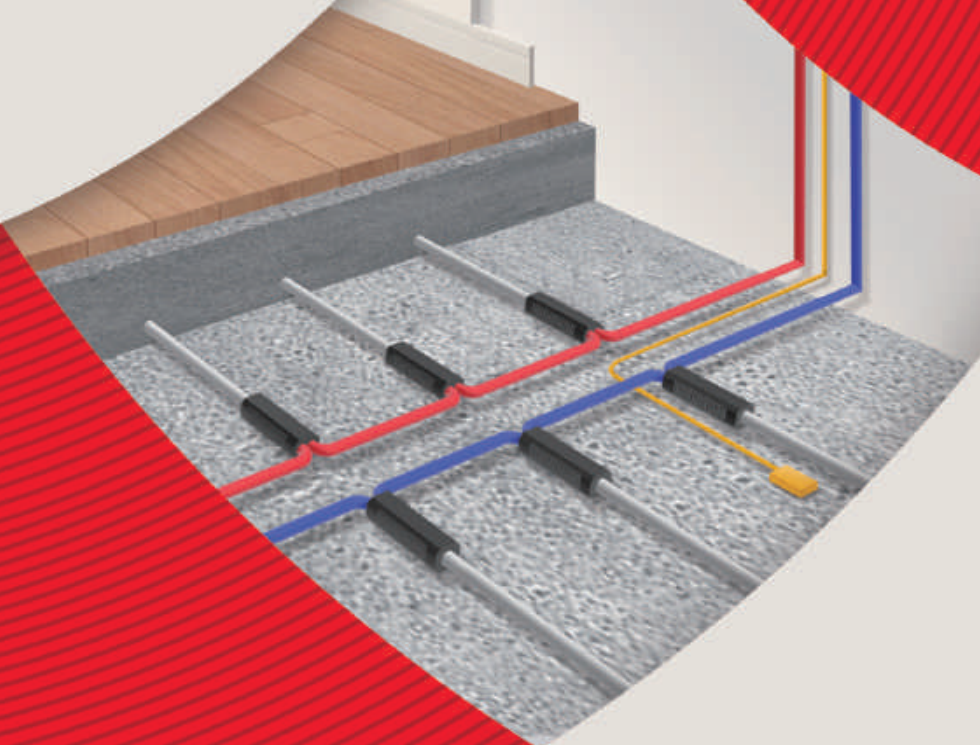
Public Procurement
Service



Korean Intellectual
Property Office

Electric Underfloor Heating System **Cosmo Electric Underfloor Heating System**

GNV Co., Ltd creates happiness and warmth

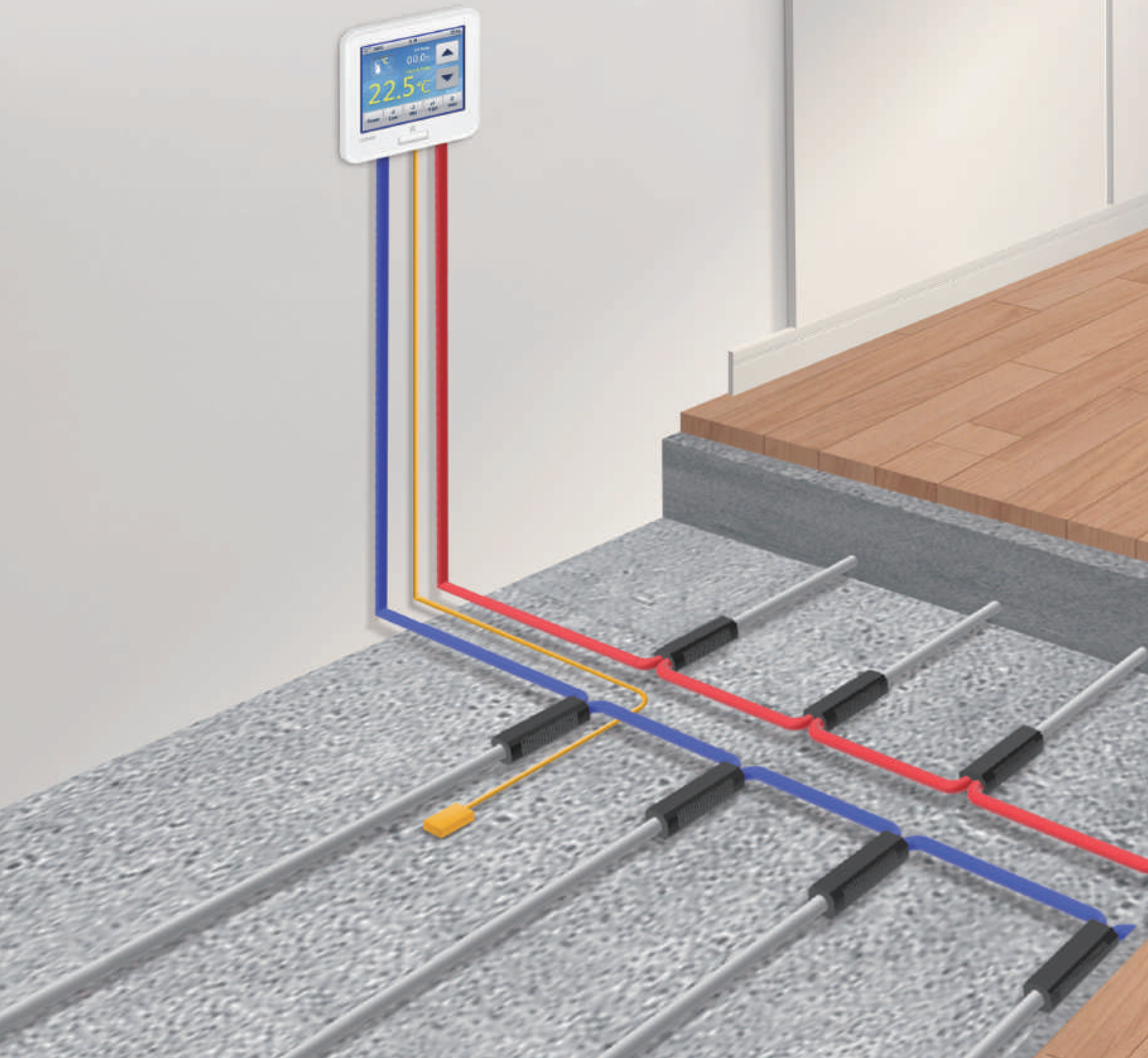


Cosmo Ondol

Eco Friendly

Cosmo electric underfloor heating system CONCEPT

Easy installation and control, No maintenance require.
No freezing trouble and semi-permanent use due to simple structures.



Heating Ray

1200°C heating ray,
Semi-permanent use

MgO

Faster heat conduction,
Excellent insulation, more than 95% purity

Stainless Steel (STS304)

Raw material:
POSCO STS304, incorrodible

Protect Cap

ABS flame, IP68 (highest rating)

Electric Wire

Excellent insulation property with
triple sheath covered

General Electric Ondol Construction

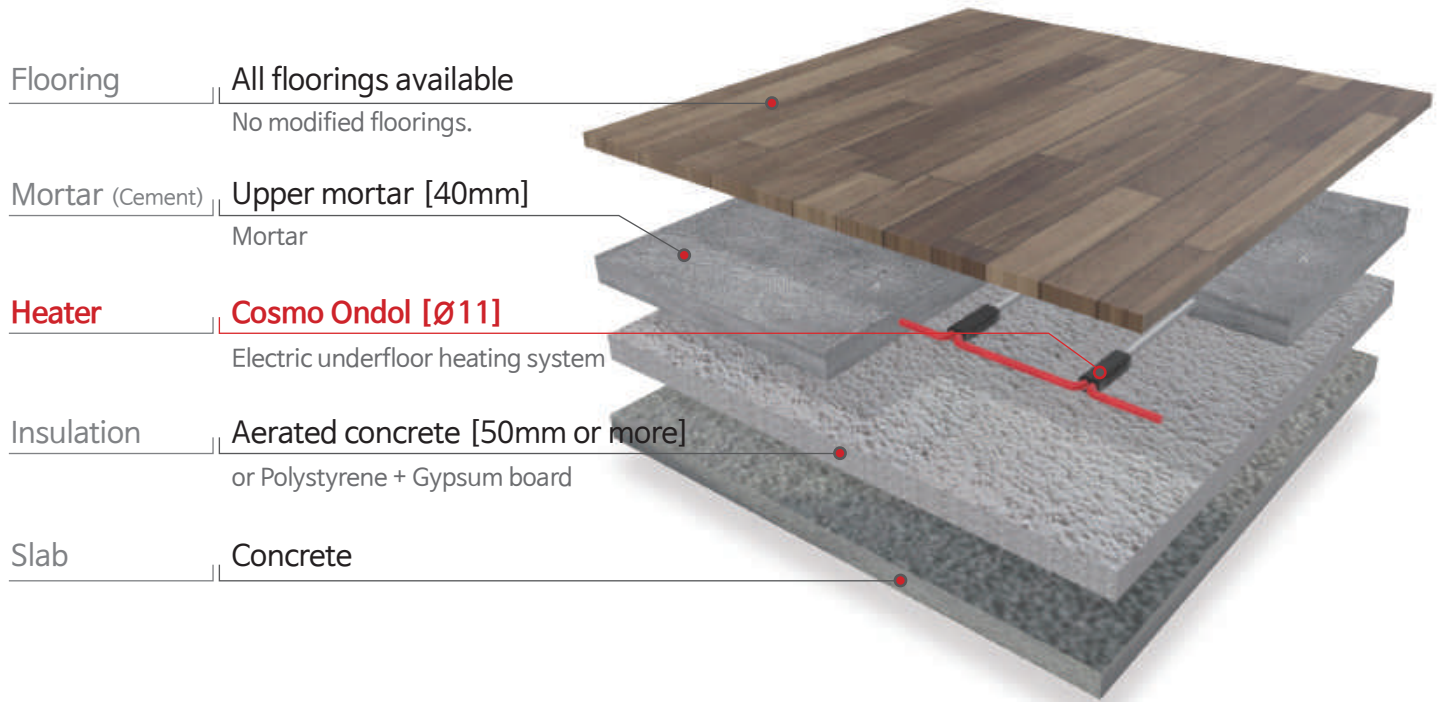
Electric underfloor heating system for efficient heating with less energy using air circulation

It is a technology uses the characteristics of radiant heating, warm air up and cold air down.



General Type Structure

* It is construction part except Cosmo underfloor heaters.



Cosmo Ondol Specification

H-Series [170W / 1m²]

L-Series [135W / 1m²]

No	Model	Size (mm)	Power Consumption (W)	Model	Size (mm)	Power Consumption (W)	Voltage (V)	Heater	Korea Public Procurement Number
1	GNV-H10	Ø11×1000	52	GNV-L10	Ø11×1000	41	220	Stainless Steel (STS304)	22989997
2	GNV-H15	Ø11×1500	78	GNV-L15	Ø11×1500	61			22989998
3	GNV-H20	Ø11×2000	104	GNV-L20	Ø11×2000	82			22989999
4	GNV-H25	Ø11×2500	130	GNV-L25	Ø11×2500	102			22990000
5	GNV-H28	Ø11×2800	145	GNV-L28	Ø11×2800	115			22990001
6	GNV-H31	Ø11×3100	161	GNV-L31	Ø11×3100	127			22990002
7	GNV-H34	Ø11×3400	176	GNV-L34	Ø11×3400	139			22990003
8	GNV-H37	Ø11×3700	192	GNV-L37	Ø11×3700	151			22990004
9	GNV-H40	Ø11×4000	207	GNV-L40	Ø11×4000	164			22990005



Snow-Melting Construction

It can be installed parking lot, sloped and curved roads with perfect waterproof.

Cosmo electric underfloor heating system can be maximized product life due to high durability and incorrodible with stainless steel.

Snow-Melting Structure

* It is construction part except Cosmo underfloor heaters.

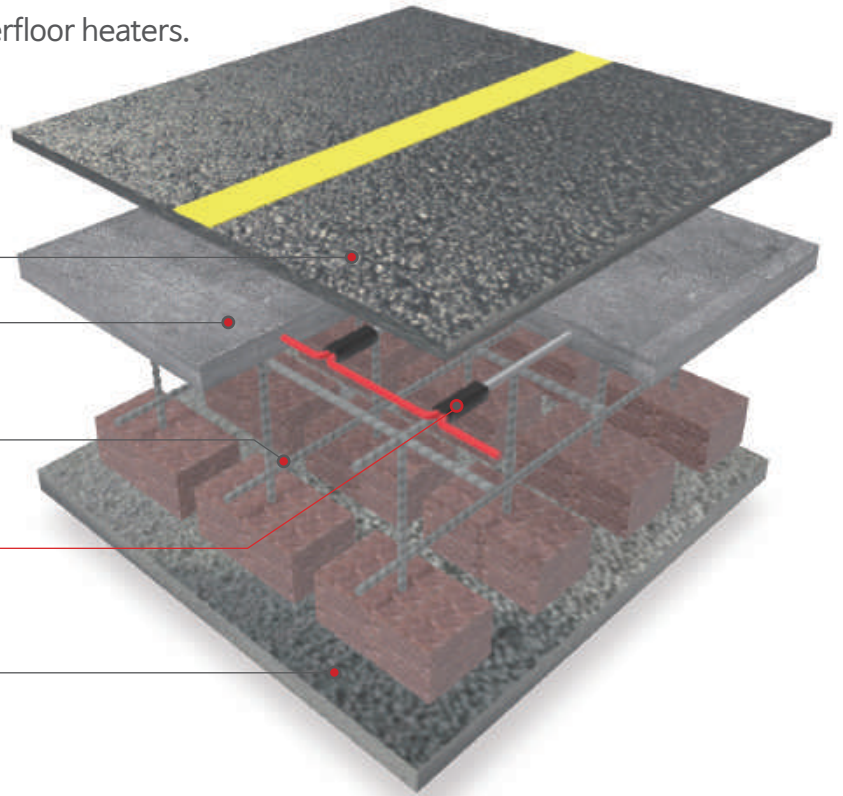
Flooring | Asphalt (optional) [50mm]

Mortar | Upper concrete [50mm]
Mortar

Rebar or wire mesh [#6]

Heater | Cosmo Heater [Ø11]

Slab | Concrete



Cosmo Ondol Specification

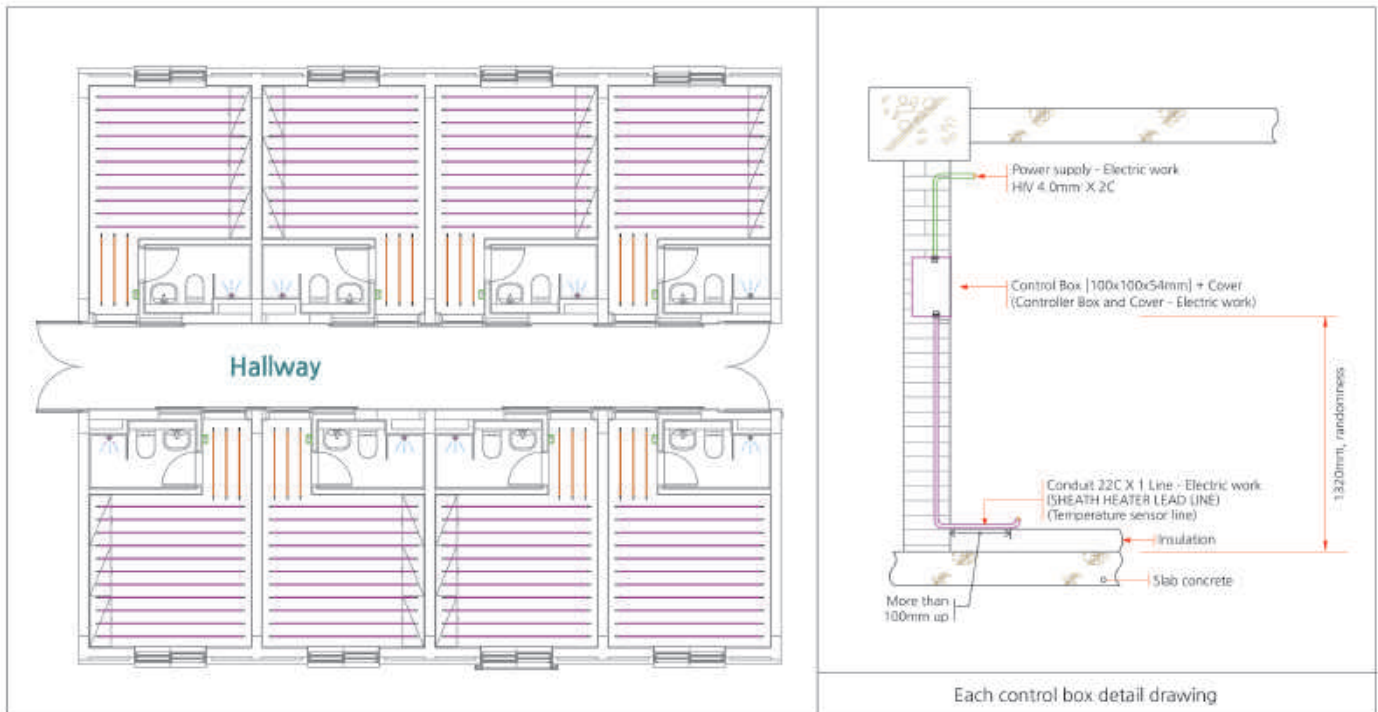
R-Series [300W / 1m²]

No	Model	Size (mm)	Power Consumption (W)	Voltage (V)	Heater
1	GNV-R10	Ø11×1000	90	220	Stainless Steel (STS304)
2	GNV-R15	Ø11×1500	140		
3	GNV-R20	Ø11×2000	180		
4	GNV-R25	Ø11×2500	230		
5	GNV-R28	Ø11×2800	250		
6	GNV-R31	Ø11×3100	280		
7	GNV-R34	Ø11×3400	310		
8	GNV-R37	Ø11×3700	340		
9	GNV-R40	Ø11×4000	360		



Cosmo Electric Underfloor Heating System

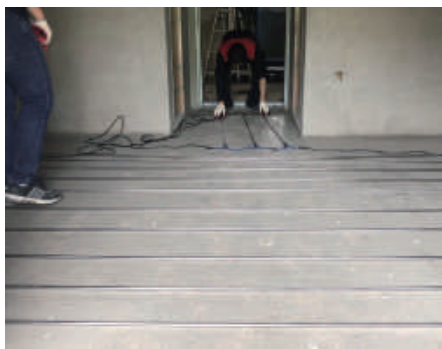
Design drawing [example]



Installation procedure



01 Floor Insulation



02 Ondol arrangement



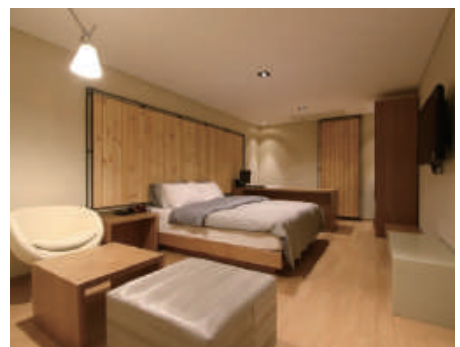
03 Ondol connection



04 Cement mortar



05 Controller installation



06 Completion

Certificates



Patent

Design registration

Electromagnetic wave report

Korea PPS Contract

R&D Lab

Venture company certificate



CE

Russian TR / CU

ISO 14001

ISO 9001

Efficiency test report

IP68 Certificate

Thermostat

Thermostat should be installed appropriate use.

Individuals

Multi thermostat

Centralized control

PC Control

Snow-Melting sensor



[GNV-8L]

[GNV-TX3]

[GNV-JPT]

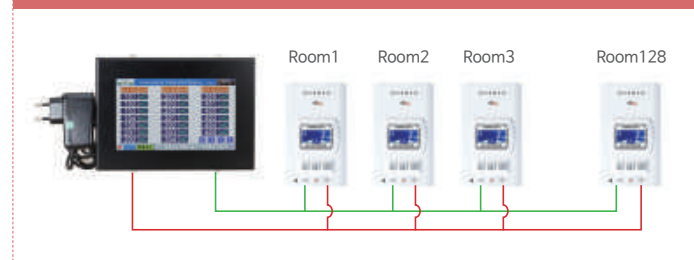
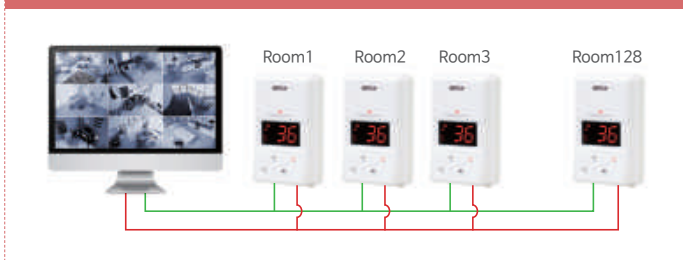
[GNV-1000D]

[128 units controller]

Communication type: Available both individual and Centralized control (Accommodations, Hospital, Church, Boarding)

PC Control

Centralized control



All area available that you need heating!



Accommodation [Hotel]



University Dormitory



Hospital



Pyeongchang Ramada Hotel



Rehabilitation Hospital

GNV creates happiness and warmth!

We are with you the invisible

GNV Co., Ltd does always best for a pleasant life for you.



Learning Center



Church



Training Institute



Residentials [House]



Pubilic Office

Cosmo Electric Underfloor Heating System

www.visiongnv.com

GNV creates happiness and warmth!
We are with you the invisible

GNV Co., Ltd does always best for a pleasant life for you.



12034 Unit2, 376-21, Soraebi-ro, Sudong-myeon,
Namyangju-si, Gyeonggi-do, Korea

T. +82-31-594-7451~3

F. +82-31-594-7454

E. 0315947451@visiongnv.com / yck1128@hanmail.net

www.visiongnv.com