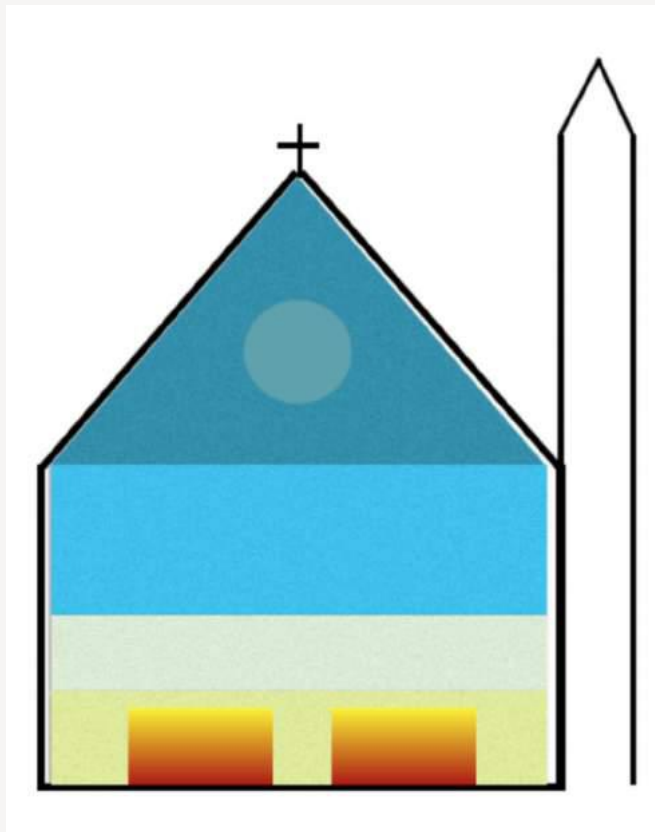


PLYTERM

INTELLIGENT HEATING
HEAT WHERE AND WHEN YOU NEED

PLACES OF WORSHIP



MOST CHURCHES ARE STILL HEATED WITH OLD AIR SYSTEMS. TODAY PLYTERM OFFERS A NEW, SIMPLE AND ECONOMICAL SYSTEM WHICH ALLOWS YOU TO SAVE FROM 50% TO 90% ON MANAGEMENT.

HOT PAD

01

Plyterm offers HOT PAD, an interlocking module to create all the heating islands you need; under the pews of the congregation, on the altar, in the chapel, in the sacristy, in the choir area or wherever you deem it necessary. HOT PAD does not heat walls, paintings or works unnecessarily; it heats only where people are staying and for the desired period.

FEATURES

02

-The HOT PAD module is a heating plate:

WIDTH: cm 52,0

THICKNESS: cm 3,4

LENGTH: varies according to the pew

-The HOT PAD module is electric POWER:

275 W/m² or 370 W/m²

SIMPLICITY OF INSTALLATION

03

HOT PAD does not require any masonry work. The installation stages can be summarized as follows:

- 1) Moving the pews
- 2) Position the necessary modules
- 3) Reposition the pews

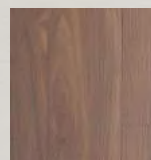
FINISHES

04

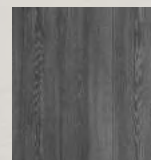
The standard finish of HOT PAD is in laminate class AC4, 8 mm thick, guaranteed resistance for commercial use, available in various colours (a few examples are shown alongside). Upon request, it is possible to use other materials or reproduce the finish of the original church flooring with special machinery.



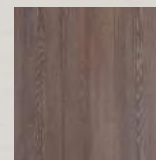
WALNUT



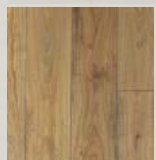
GREY
OAK



BROWN
OAK



NATURAL
OAK



DESIGN

BESIDES THE INNOVATION CONSTITUTED BY ITS MODULARITY, THE FUNDAMENTAL FEATURE OF PLYTERM IS THE ENERGY SAVING THAT ITS INCORPORATED RADIANT TECHNOLOGY ALLOWS. FURTHERMORE, THE INSTALLATION OF A CENTRAL STRUCTURE SUCH AS A BOILER IS NOT REQUIRED, SINCE EACH MODULE IS INDEPENDENT. BEING IN POSSESSION OF THE CE MARK, OUR PRODUCTS COMPLY WITH THE DIRECTIVES: 2011/65/EC (ROHS), 2014/30/EU (EMC), 2014/35/ EU (LVD). THE INTERNAL ELECTRICAL HEATING ELEMENT IS NEMKO AND CB CERTIFIED.

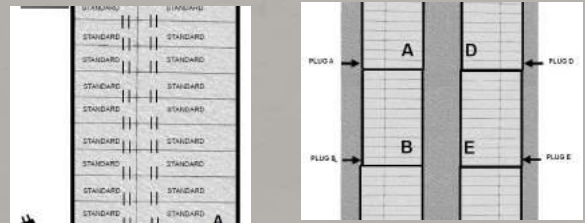
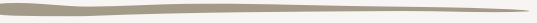
Estimates using 3D
pre-operative simulation



Electrical system project



Production



SIZING

BELOW ARE SOME EXAMPLES OF SYSTEM SIZING SIMPLY TO UNDERSTAND THE DIMENSIONS AND POWER REQUIRED.

PEW LENGTH	CM 200
MODULE LENGTH	CM 210

MODULE MEASUREMENT: 210 X 52 CM
OCCUPIED AREA: 8.74 SQM
MODULE POWER: 300 WP
TOTAL POWER REQUIRED: 2400 W
ABSORPTION PER SQM: 275 W

5 PEW ISLAND 8 MODULES



01

2 ISLANDS 5 PEWS 16 MODULES



02

2 ISLANDS 10 PEWS 34 MODULES



03

4 ISLANDS 10 PEWS 64 MODULES



04

MODULE MEASUREMENT: 210 X 52 CM
OCCUPIED AREA: 37.13 SQM
MODULE POWER: 300 WP
TOTAL POWER REQUIRED: 10200 W
ABSORPTION PER SQM: 275 W

MODULE MEASUREMENT: 210 X 52 CM
OCCUPIED AREA: 74.26 SQM
MODULE POWER: 300 WP
TOTAL POWER REQUIRED: 20400 W
ABSORPTION PER SQM: 275 W

PEW LENGTH	CM 250
MODULE LENGTH.	CM 260

MODULE MEASUREMENT: 260 X 52 CM
OCCUPIED AREA: 10.82 SQM
MODULE POWER: 375 WP
TOTAL POWER REQUIRED: 3000 W
ABSORPTION PER SQM: 275 W

MODULE MEASUREMENT: 260 X 52 CM
OCCUPIED AREA: 21.64 SQM
MODULE POWER: 375 WP
TOTAL POWER REQUIRED: 6000 W
ABSORPTION PER SQM: 275 W

MODULE MEASUREMENT: 260 X 52 CM
OCCUPIED AREA: 46.00 SQM
MODULE POWER: 375 WP
TOTAL POWER REQUIRED: 12750 W
ABSORPTION PER SQM: 275 W

MODULE MEASUREMENT: 260 X 52 CM
OCCUPIED AREA: 92.00 SQM
MODULE POWER: 375 WP
TOTAL POWER REQUIRED: 25500 W
ABSORPTION PER SQM: 275 W

SYSTEM MANAGEMENT

IT IS POSSIBLE TO REDUCE THE POWER REQUIRED WITH OUR LOAD MANAGEMENT UNIT. WITH THE LATTER WE CAN INTERVENE BY MANAGING THE ROTATING LOADS OR DIMMING THE LOADS THROUGH PIC (MICROCONTROLLER), SETTING A MAXIMUM POWER LIMIT BEYOND WHICH THE SYSTEM CANNOT ABSORB MORE WATTS.

THE CONTROL UNIT IS INTEGRATED WHEN THERE ARE LIMITS OF USE IMPOSED BY THE CONTRACTUAL POWER OF THE MANAGER. (OPTIONAL)

IT IS ALSO POSSIBLE TO MANAGE THE HEATING REMOTELY BY SWITCHING ON OR OFF SOME GROUPS OF PLATFORMS UNDER THE SEATS DEPENDING ON THE NUMBER OF FAITHFUL PRESENT. (OPTIONAL)

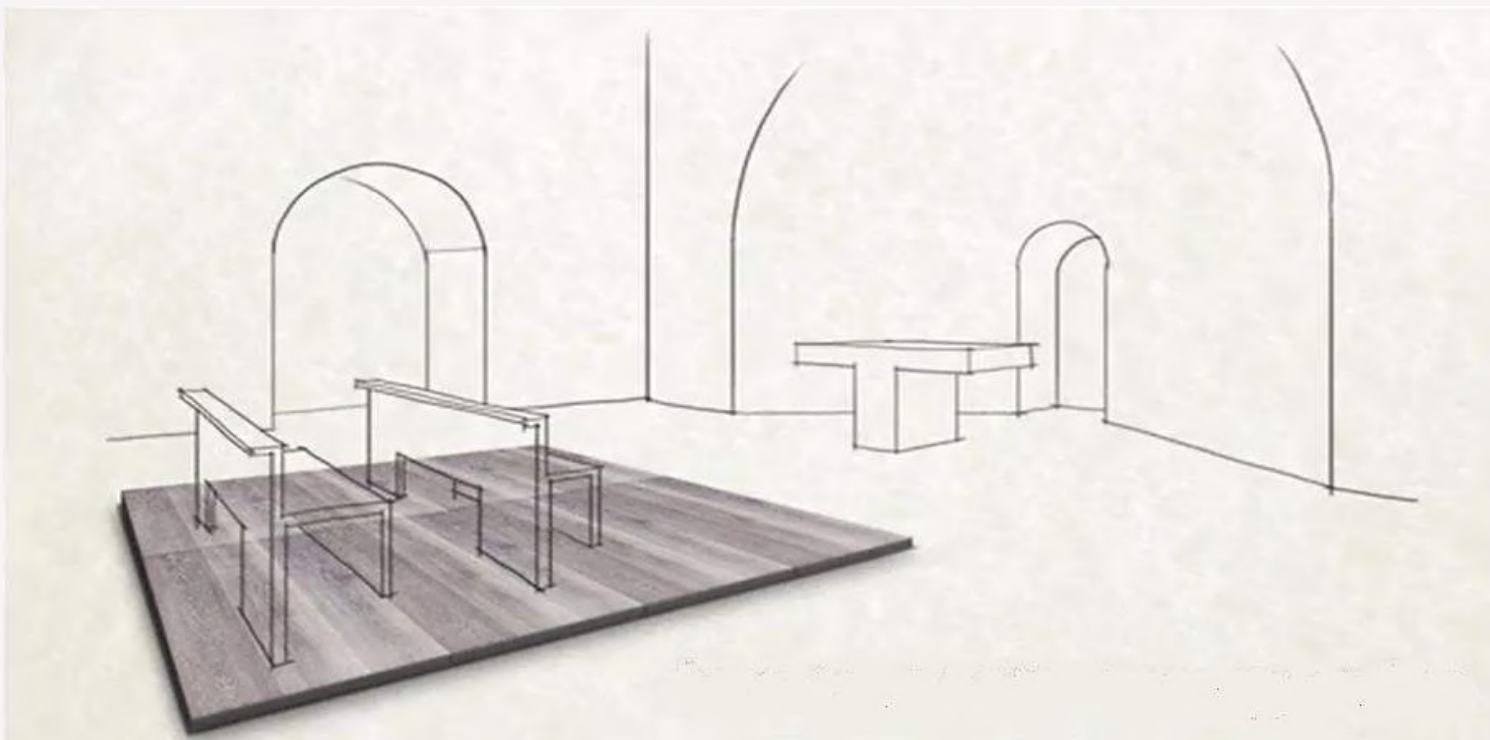


SIMULATION OF CONSUMPTION FOR 100 M2 OF PLYTERM HEATING PLATFORM IN A CHURCH LOCATED IN A COLD GEOGRAPHIC AREA: INTERNAL AVERAGE T IN THE COLD SEASON 7 °C

- MAX POWER at full capacity: 37.00 kWp
- POWER reduced by 20% with CONTROL UNIT PLYTERM: 29.5 kWp
- POWER reduced by 30% with CONTROL UNIT PLYTERM: 26.0 kWp
- POWER reduced by 50% with CONTROL UNIT PLYTERM: 18.5 kWp

CASE 1: 1 SERVICE ON SATURDAY, 2 SERVICES ON SUNDAY, PLUS DAYS OF OBLIGATION
 CASE 2: 1 SERVICE ON SATURDAY, 3 SERVICES ON SUNDAY, PLUS DAYS OF OBLIGATION

	No. of religious services over the period November - April	Hours of operation per religious service	Total hours of operation	Average power consumption kWp	Total winter consumption kWh
CASE 1	86	2	172	26	4472
CASE 2	110	2	270	26	5720



PLYTERM

**SUBSTANTIAL COMFORT SUBSTANTIAL
SAVINGS RAPID SILENT HEATING
DOES NOT MOVE DUST
SHORT INSTALLATION TIMES
PUZZLE FEATURES THAT CAN BE DISMANTLED**

EN-TECH SRL

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www.plyterm.com

“Intelligent heating”