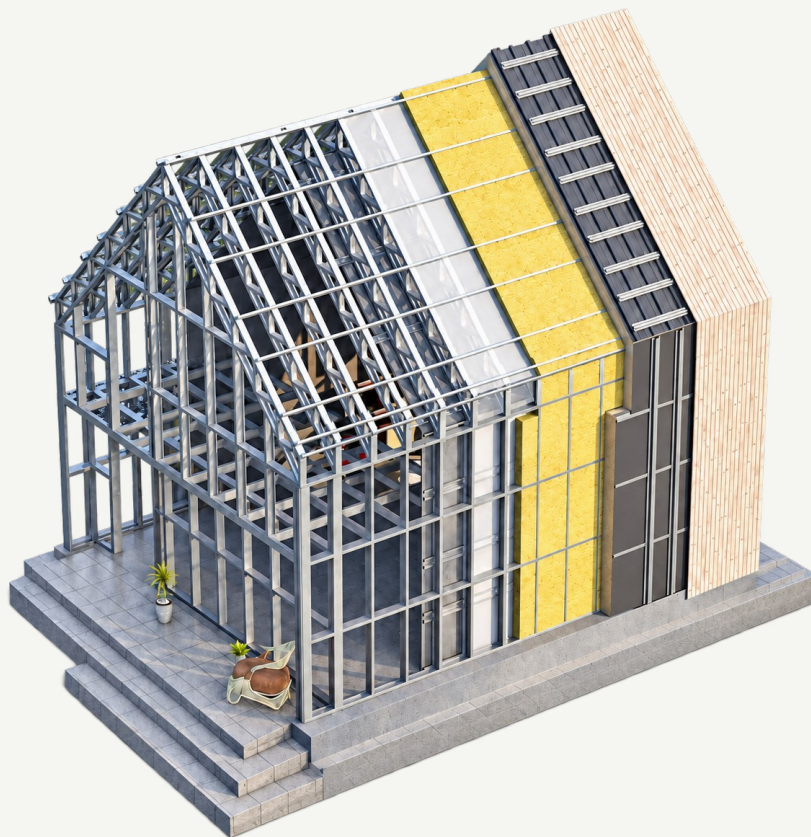


LGS PANEL KIT

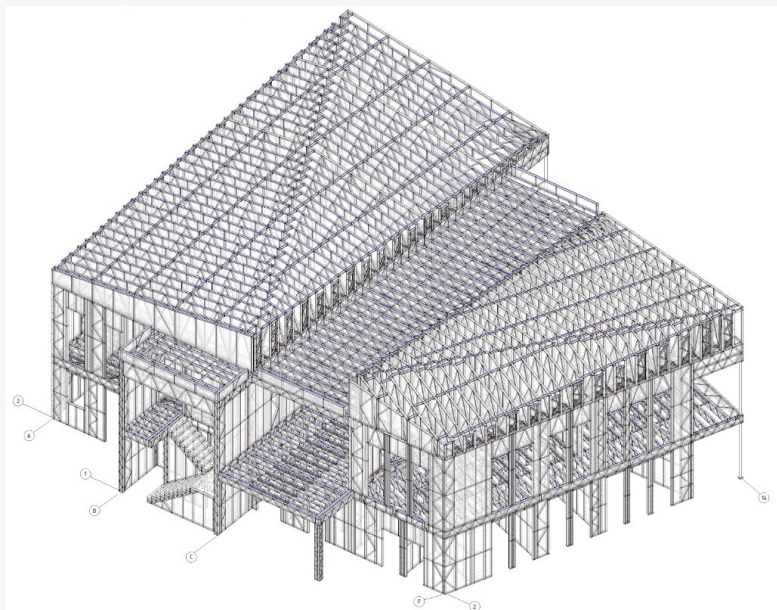
A building system designed in parts.
Manufactured for your project.



01 / WHAT YOU RECEIVE

One project. One coordinated kit.

NP5 prepares project-specific structural elements in the factory and supplies them for assembly on site. A panel kit is not a finished volumetric module.



PROJECT STRUCTURAL MODEL / ILLUSTRATIVE EXAMPLE

WALL PANELS

ROOF ELEMENTS

FLOOR ELEMENTS*

* Where required by the building design. Exact element scope and connections are defined in the quotation.

02 / MANUFACTURED IN LITHUANIA

Built as panels. Not as one volume.

Profiles are formed and processed to the structural design. Wall, roof and intermediate-floor elements are prepared and identified for the project.



REAL NP5 FACTORY PHOTOGRAPH / PANEL ASSEMBLY

03 / ASSEMBLY ON SITE

Designed to travel. Prepared to assemble.

For larger buildings, the structure is manufactured in sections and assembled at the project site. The sequence follows the approved project documentation.



REAL NP5 PROJECT / CONSTRUCTION STAGE

CONFIRM BEFORE ORDERING

Installation scope, foundations, lifting, delivery, local approvals and finishes are agreed separately for each project.

04 / ARCHITECTURAL INTEGRATION

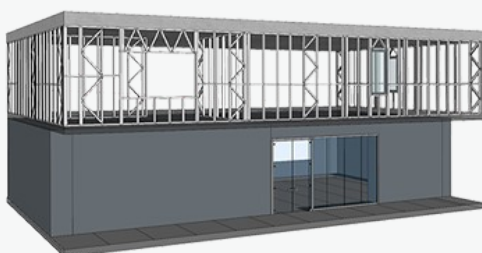
Lightweight infill. Hybrid structures.

LGS elements can be designed as infill wall panels within an independent structural frame, or combined with reinforced concrete and other primary structural systems.



INFILL WALLS

Non-primary wall elements within a separately designed building frame.



HYBRID CONSTRUCTION

LGS panels integrated with concrete or other engineered primary structures.

05 / EXISTING BUILDINGS

Additional storeys. Less structural weight.

LGS construction is an option for rooftop extensions and added floors where reduced structural dead load is an advantage. Feasibility is verified for each existing building.



ILLUSTRATIVE HYBRID SCHEME / CONCRETE LOWER LEVEL + LGS UPPER LEVEL

DESIGN CHECKS

Existing load capacity / anchorage and load transfer / lateral stability / fire separation / roof weatherproofing

WALL ASSEMBLIES / TIMBER

Thermally modified timber

Two documented material options. Layer names retained from the original English NP5 catalogue.

OPTION 1.1

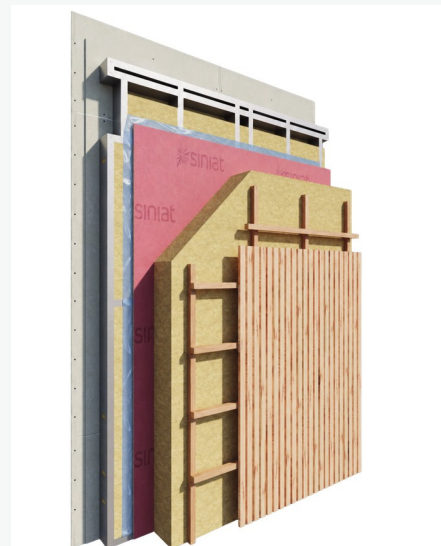
TIMBER FACADE / PIR



- Oak veneer finishing panel
- Moisture-resistant board
- LGSF + mineral wool
- "SINIAT" board
- Polyurethane (PIR) insulation board
- Vertical timber battens
- Horizontal timber battens
- Thermally modified timber finish

OPTION 1.2

TIMBER FACADE / MINERAL WOOL



- Oak veneer finishing panel
- Moisture-resistant board
- LGSF + mineral wool
- Vapour barrier
- "SINIAT" board
- Mineral wool insulation board
- Vertical timber battens
- Horizontal timber battens
- Thermally modified timber finish

WALL ASSEMBLIES / WPC

Wood-plastic composite

Two documented material options. Layer names retained from the original English NP5 catalogue.

OPTION 2.1

WPC FACADE / PIR



- Oak veneer finishing panel
- Moisture-resistant board
- LGSF + mineral wool
- "SINIAT" board
- "Omega" ventilated profile
- Polyurethane (PIR) insulation board
- Wood-plastic composite (WPC) finish

OPTION 2.2

WPC FACADE / MINERAL WOOL



- Oak veneer finishing panel
- Moisture-resistant board
- LGSF + mineral wool
- Vapour barrier
- "SINIAT" board
- "Omega" ventilated profile
- Mineral wool insulation board
- Wood-plastic composite (WPC) finish

WALL SYSTEMS / PROJECT-SPECIFIC DESIGN

Wall systems tailored to each project.

NP5 LGS panels can be configured for different building uses and national requirements. Framing, sheathing, insulation and finishes are selected as one coordinated assembly.

EXTERNAL WALLS

Thermal envelope / sheathing / ventilated or bonded facade

INTERNAL & SEPARATING WALLS

Fire / acoustic performance / boarding and insulation

INFILL & HYBRID CONSTRUCTION

Lightweight panels integrated with concrete or steel structures

LOCAL PERFORMANCE REQUIREMENTS

Wind / fire / acoustic / energy / moisture / local regulations

ONE LGS SYSTEM. PROJECT-SPECIFIC WALL CONFIGURATIONS.

FIRE PERFORMANCE / DOCUMENTED ASSEMBLY

C100 LGS wall. REI 60 classification.

The referenced Siniat system includes C100 steel studs, specified internal boards, mineral wool and an approved external sheathing option.

INTERIOR BOARD 01	Nida Ogien Plus 12.5 mm (up to 4.0 m) or 15 mm (up to 4.5 m)
INTERIOR BOARD 02	Nida Cicha 12.5 mm
STEEL STUDS	C100 / 1.2 or 1.6 mm steel / max. 600 mm centres
CAVITY INSULATION	Stone wool at least 100 mm / density at least 40 kg/m ³
EXTERNAL SHEATHING	Siniat Weather Defence 12.5 mm — permitted option
ADDITIONAL BOARDING	As specified where fire exposure from the exterior is required

REI 60 IS AN ASSEMBLY CLASSIFICATION, NOT A C100 PROFILE RATING.

WALL ENVELOPE / INSULATED FACADE OPTIONS

Siniat sheathing. Flexible facade finishes.

NP5 LGS wall panels can incorporate external insulation with rendered finishes or lightweight Original Meldorf brick-effect facing within a compatible Caparol facade system. The build-up is specified for each project.



ILLUSTRATIVE FACADE CUTAWAY

01 ENGINEERED LGS FRAME

Steel studs and cavity insulation

02 SINIAT WEATHER DEFENCE

External sheathing board

03 BONDED EXTERNAL INSULATION

EPS and compatible adhesive, as specified

04 SUPPLEMENTARY FIXINGS

Anchored into the LGS framing as designed

05 FACADE FINISH

Render or Original Meldorf facing

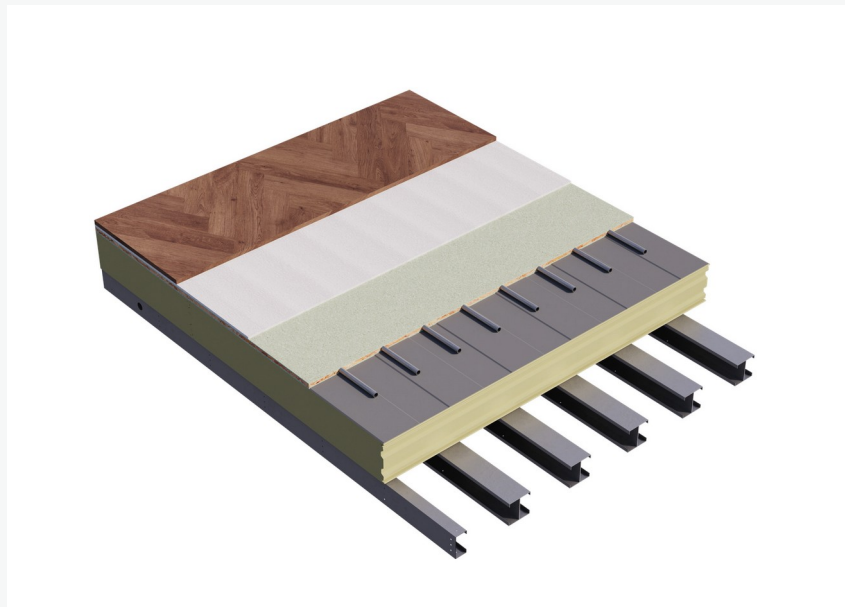
SYSTEM DETAIL CONFIRMED FOR EACH PROJECT

The final facade build-up, fixings, fire performance and manufacturer compatibility are confirmed for the project. Illustration is indicative, not a certified NP5 assembly.

ROOF & FLOOR SYSTEMS / FLOOR

Floor construction

Original NP5 assembly illustration and complete English material specification.

**MATERIAL LAYERS / AS DOCUMENTED**

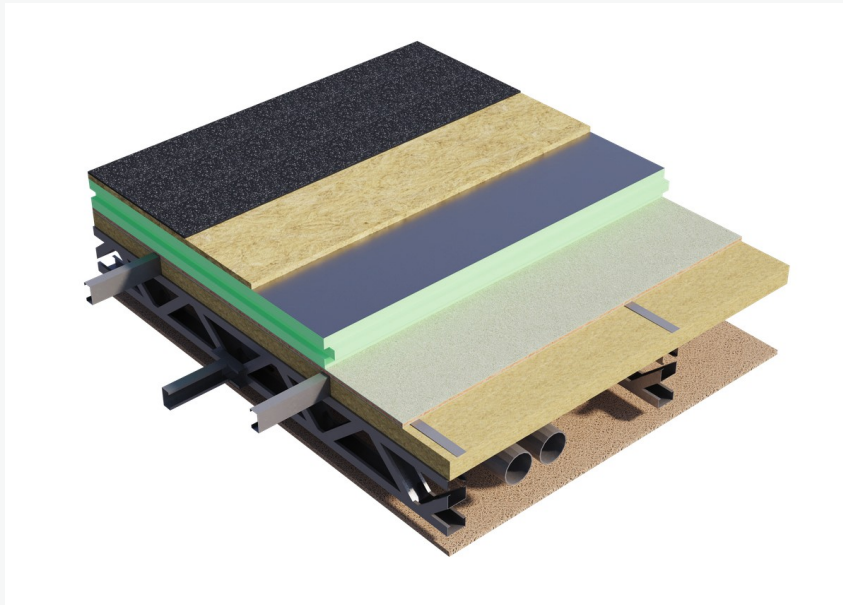
- Durable floor finish: vinyl, carpeting, etc.
- MFP structural board + underfloor heating
- PIR insulation – 80-200 mm
- Steel structural frame

This is a reference floor build-up. Underfloor heating and finishes are not automatically included in a structural panel kit.

ROOF & FLOOR SYSTEMS / FLAT ROOF

Flat roof construction

Original NP5 assembly illustration and complete English material specification.

**MATERIAL LAYERS / AS DOCUMENTED**

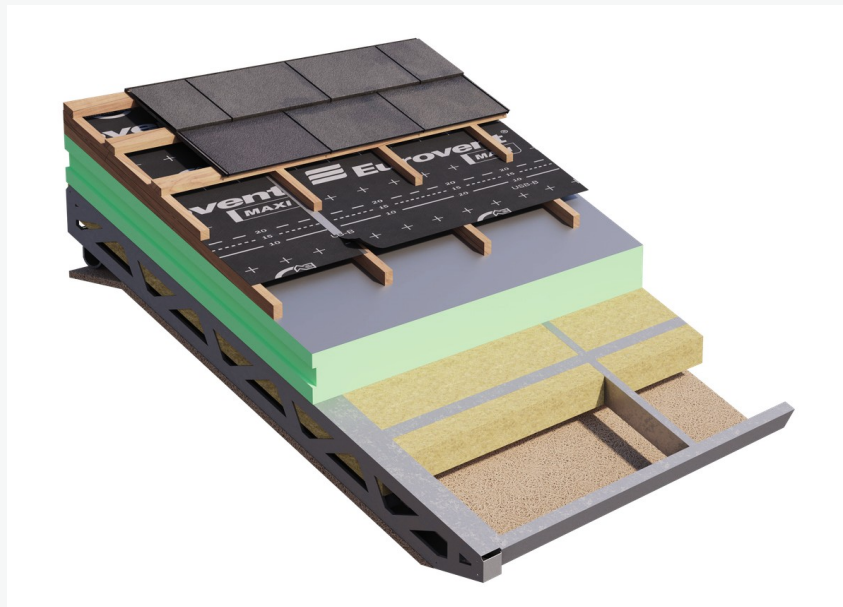
- EPDM or bituminous waterproofing roof membrane
- Mineral wool insulation – 20 mm
- PIR insulation – 100-240 mm
- Moisture-resistant board
- Steel structural truss + mineral wool
- CEWOOD acoustic panels – 20 mm

Waterproofing, insulation and internal ceiling layers depend on the contracted envelope package and engineering.

ROOF & FLOOR SYSTEMS / PITCHED ROOF

Pitched roof construction

Original NP5 assembly illustration and complete English material specification.



MATERIAL LAYERS / AS DOCUMENTED

- Roof covering: concrete or ceramic tiles, fibre-cement sheets or natural slate
- Timber frame battens
- Roof diffusion membrane
- Timber frame battens
- PIR insulation – 100-200 mm
- Steel structural truss + mineral wool
- CEWOOD acoustic panels – 20 mm

Roof coverings and ceiling finishes are illustrative scope options, not a standard inclusion.

FROM ARCHITECTURAL BRIEF TO PANEL KIT

Design to manufacture. With clear interfaces.

NP5 coordinates the LGS element package with the project design. Scope, engineering interfaces and local approvals are confirmed before production.

01	ARCHITECTURAL INPUT Plans, elevations, intended use and site location
02	STRUCTURAL COORDINATION Loads, openings, connections and primary structure
03	PACKAGE DEFINITION Wall, roof, floor and facade scope agreed
04	FACTORY PRODUCTION Project-specific profiles and panel elements
05	DELIVERY & ASSEMBLY Marking, sequence, access and installation responsibilities

The local architect/engineer confirms site-specific regulatory compliance, foundations and relevant technical performance.

Let's detail your next project.

Send the drawings, building location, intended use and required package. We will define the appropriate LGS supply and coordination scope.

www.np5.eu

info@np5.eu

+370 679 41 770 / +370 692 69 555

Kreivoji St. 7, Šiauliai, Lithuania