siniat
Shaping the way people build

LaDura

The first high density plasterboard with hardwood insert


FaasSM
propices

LaDura

EXCELLENCE IN QUALITY

WE BUILD ON SOLID FOUNDATIONS

SINIAT, leader in plasterboard systems, is present in Europe and Latin America, having 43 manufacturing sites in 13 countries.

The company is based in France, Avignon. The Technical Development Center is also located here, having a vast experience and leading innovation and research in plasterboard products and systems.

SINIAT Romania owns 2 manufacturing sites - the plasterboard factory in Bucharest and the plaster factory in Aghireșu, Cluj County.

In 2011, SINIAT joined Etex Group.

Etex Group manufactures and markets high quality materials, providing its customers with innovative solutions for constructions. Based in Belgium, the Group is present in 44 countries, having 121 factories and employing over 17,000 people. Etex Group has four main business lines:

- plasterboards and plaster for constructions
- small and large roofing materials
- passive fire protection systems for constructions
- ceramic tiles for floors, walls, façades.

SINIAT provides its customers with a wide range of plaster-based products and plasterboard systems, meeting all interior finishing requirements.

NIDA plasterboard systems from siniat are ideal for creating or refurbishing house interiors, offering flexibility and comfort. SINIAT provides special systems – systems for high elevations, fire-resistant systems, solutions for cinema halls, solutions for very wet areas, special solutions for schools and hospitals.

EXCELLENCE IN QUALITY

LOCAL PRODUCT BRANDS - NIDA AND ADERA

NIDA and ADERA are the local brands under which plasterboard products and systems are marketed in Romania. SINIAT products are certified in accordance with European standards, offering high quality and durability, while ensuring outstanding performances. They are excellent choices both for new constructions and for the renovation of existing buildings.

- NIDA plasterboards meet any expectations and guarantee high quality, technical and esthetic results. They are the perfect solution for walls, ceilings, partitions, claddings and finishes.
- NIDA Profesional jointing plaster and NIDA Boardfix bonding plaster are ideal solutions for finishing of plasterboard systems.
- ADERA range includes high quality products for multiple applications: plaster for constructions, modeling plaster, finishing plaster, plaster-based mortar for manual or mechanic coatings.
- NIDA metal profiles (UD, CD, UW guides, CW studs, crossbeams) are intended for walls, ceilings, recesses, bookcases or wardrobes embedded in the wall, as well as for claddings of existing surfaces.
- Accessories for NIDA plasterboard systems.

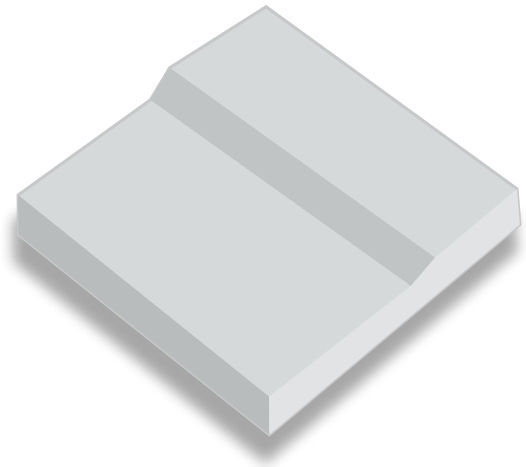
THE GUARANTEE OF THE PLASTERBOARD SYSTEM

NIDA System products and components are tested so as to ensure system compatibility and performance. Due to the thorough testing of our products in reputed domestic or international institutions, we are in a position to guarantee the technical performance of our systems, offering peace of mind and safety to our users, contractors, engineers and architects.

When the systems are entirely built with NIDA components and materials, by qualified professionals, in compliance with specialized technical information and relevant standards, SINIAT offers the NIDA System guarantee. For additional details on NIDA plasterboard systems, please contact SINIAT's Technical Assistance Department, or refer to the relevant documents on the company's website, at www.siniat.com.

IMPORTANT INFORMATION

LaDura – innovation by Siniat



LaDura board is the perfect combination between hardwood fiber, fiberglass and gypsum. Due to the use of additives, it is suitable for use in spaces with high impact resistance requirements. LaDura is the only plasterboard classified according to the European standard EN 520.

LaDura is the perfect choice!

Characteristics

- The core, supplemented with special additives, guarantees very low water absorption - type H1, which is the highest class in EN 520. This helps:
  - optimize protection in spaces with high humidity, such as bathrooms, kitchens etc.
  - ensure reduced board deformation in wet conditions.
- Enhanced surface hardness – up to 70% better than standard plasterboards
- Guaranteed resistance to shock
- High resistance to compression and bending
- Low damage risk in areas subject to high mechanic stress, such as hospitals, schools, hallways
- Pullout resistance up to 60% higher than standard plasterboards
- Ideal for systems with seismic resistance requirements, or as reinforcement element
- Ideal for fire protection
- Very good workability
- Classification according to EN 520: D, E, F, H1, I, R.

Fixing loads to plasterboard walls is no longer an issue!

LaDura offers all the benefits of plasterboard reinforced with fiberglass and hardwood insert:

- Enhanced impact strength, for use in high traffic areas
- Excellent pullout resistance
- Easy to cut with a simple cutter / thus helping to reduce installation time and costs
- LaDura can be installed on metal structure with the minimum thickness of 0.6 mm, as well as on wood structure, thus reducing material costs
- Fully recyclable – low embodied carbon, thus reducing environmental impact
- Superior finish
- High impact resistance, pullout resistance, protection against moisture, acoustic insulation and fire protection
- Wood fiber composite technology increase strength, for easier use on the worksite.

Due to these characteristics, LaDura can be specified for any type of project.

APPLICATIONS

LaDura – innovation by Siniat

Applications

Developed specifically for severe and extreme duty applications, LaDura high density board fulfills the most demanding technical requirements:

- fire protection
- high acoustic insulation
- resistance to humidity
- resistance to shearing
- pullout resistance
- impact resistance.

LaDura board is ideal for the following applications:

- crowded spaces with heavy traffic (such as hallways of hospitals, schools, sports halls etc.)
- public spaces prone to vandalism
- schools, hospitals, sports halls
- cinemas, museums and art galleries
- wholesale and retail warehouses
- prisons and detention centers etc.

You may contact SINIAT technical team for further recommendations regarding the right products and systems, depending on the project requirements and specific uses.

Due to its fixing capacity, LaDura can be specified when console loading is paramount. If fixed properly, LaDura can support loads over **100 kg**.

CHARACTERISTICS OF LADURA BOARDS

LaDura is the only plasterboard classified according to SR EN 520:

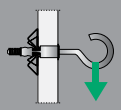
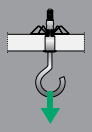
Classification acc.to SR EN 520 + A1: 2010	Description
Board type D	Plasterboards with controlled density, with one face, on which various plaster-based coatings or decorations can be applied. They are appropriate for obtaining enhanced performances in certain applications.
Board type E	Plasterboards specifically designed to be used as insulating linings for exterior walls. These boards are not appropriate for decorations. They are not designed to be permanently exposed to exterior climate conditions. These wallboards have a low degree of water absorption and must have minimum permeability to water vapors.
Board type F	Plasterboards with one face on which proper plaster-based coatings or decorations can be applied. The gypsum core of these boards is reinforced with mineral fibers and/or other additives to enhancecohesion at high temperatures.
Board type H	Plasterboards which contain additives to reduce water absorption. They can be suitable for special applications where low water absorption properties are required to improve board performance. For identification, these boards are classified under the types H1, H2, H3, with various water absorption performances.
Board type I	Plasterboards used in applications which require a high level of surface hardness. One face is appropriate for the application of plaster-based coatings or decorations.
Board type R	Plasterboards used for special applications with high resistance requirements, as they have enhanced resistance to breaking, both longitudinal and transversal. One face can be covered with plaster-based coatings or decorations.

Board							
SAP code	Description	Thickness [mm]	Width* [mm]	Length* [mm]	Total area/pallet [m^2]	Packaging boards/ pallet	Weight/pallet [kg]
91934	LaDura BA13	12,5	1200	2000	120,00	50	1536
91935	LaDura BA15	15	1200	2400	124,80	40	1947

TECHNICAL DATA		
Description	LaDura BA13	LaDura BA15
Thickness [mm]	12,5	15
Width* [mm]	1200	1200
Length* [mm]	2000	2400
Edge	tapered (BA)	tapered (BA)
Weight** [kg/m^2]	12,8	15,6
Density** [kg/m^3]	1020	1040
Classification	Board type D, E, F, H1, I, R	Board type D, E, F, H1, I, R
Hardness (Brinell) [N/mm^2]	≥35	≥35
Max. application temperature	45ºC	45ºC
Fire reaction class	A2-s1,d0	A2-s1,d0
Thermal conductivity [W/mK]	0,25	0,25
Resistance to bending in longitudinal sense [N]	≥725	≥870
Resistance to bending in transversal sense [N]	≥300	≥360
Shearing resistance [N]	908	908
Packaging [boards/pallet]	50	40
Shearing resistance (acc. BS EN 520, section C13) [kN]	0,91	0,91
Max. recommended pullout resistance – simple cladding***	-40 Kg/ fixing (Molly dowel) -60 kg/ linear m of wall	-50 Kg/ fixing (Molly dowel) -70 kg/linear m of wall
Max. recommended pullout resistance – double cladding***	-60 kg/ fixing (Molly dowel) -140 kg/ linear m wall	-85 kg/ fixing (Molly dowel) -200 kg/ linear m of wall

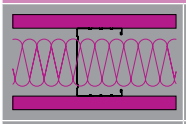
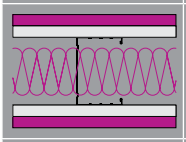
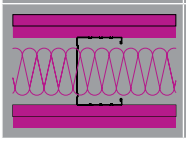
* *Other sizes are also available based on special order.*
** *Values for information purposes.*
*** *For the correct sizing of your LaDura system, please contact the Technical Assistance Department of SINIAT or send your requests at siniat@siniat.com*

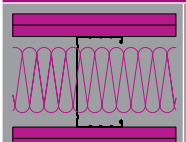
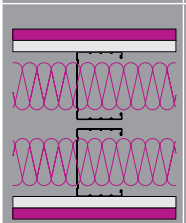
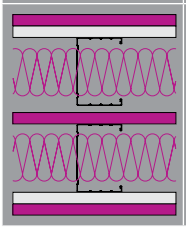
SYSTEM PERFORMANCE

PULLOUT RESISTANCE*					
Load direction	Number and type of boards	Hanging hook (1 nail) 	Hanging hook (2 nails) 	Screw dowel (Ø 9 mm) 	Molly dowel (Ø 10 mm) 
	1 LaDura BA13	10 kg	18 kg	40 kg	50 kg
	1 NIDAStandard BA13 + 1 LaDura BA13	10 kg	48 kg	40 kg	50 kg
	2 LaDura BA13	10 kg	18 kg	45 kg	65 kg
	1 LaDura BA13	/	/	40 kg	45 kg
	1 NIDAStandard BA13 + 1 LaDura BA13	/	/	40 kg	55 kg
	2 LaDura BA13	/	/	55 kg	65 kg

**these load values are only valid for the boards; the wall structure will have to be properly sized depending on the total load. The distance between the fixing points of the board to the metal structure is maximum 30 cm*

Performance of LaDura system compared to traditional systems:

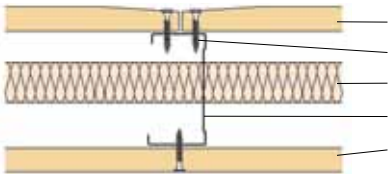
INTERIOR DISTRIBUTION WALLS				
LaDura* systems			Traditional systems**	
Description		R_w	Description	R_w
	Structure of 75 mm 1 LaDura BA15 on each side Glass wool density. 40 kg/m³ thickness 60 mm	53 dB	Masonry of ceramic blocks with vertical voids, of 8 cm Coating on both sides	42 dB
	Structure of 75 mm 1 NIDAStandard BA13 + 1 LaDura BA13 on each side 56 dB Glass wool density. 40 kg/m³ thickness 60 mm	56 dB	Masonry of ceramic blocks with vertical voids, of 12 cm 42,5 dB Coating on both sides	42,5 dB
	Structure of 100 mm 2 LaDura BA13 on each side 62 dB Glass wool density40 kg/m³ thickness 80 mm	62 dB		

SEPARATION WALLS BETWEEN HOUSING UNITS				
	Structure of 75 mm 2 LaDura BA13 on each side Glass wool density. 40 kg/m³ thickness 60 mm	60 dB	Masonry of ceramic blocks with vertical voids of 25 cm Coating on both sides	52 dB
	Double structure of 75 mm 1 NIDAStandard BA13 + 1 LaDura BA13 on each side Double glass wool dens. 40 kg/m³ thickness 60 mm	68 dB	Masonry of ceramic blocks with vertical voids of 12 cm Interstitial space 6 cm with class wool in between, dens. 50 kg/m³ thickness 50 mm Masonry of ceramic blocks with vertical voids of 8 cm Coating on both sides	53 dB
	Double structure of 75 mm 1 NIDAStandard BA13 + 1 LaDura BA13 on each side 1 LaDura BA13 central Double glass wool dens. 40 kg/m³ thickness 60 mm	71 dB	Masonry of ceramic blocks with vertical voids of 17 cm Interstitial space 3 cm Half-full blocks thickness 8 cm Coating on both sides	54 dB

** data referring to lab certificates and acoustic simulations*

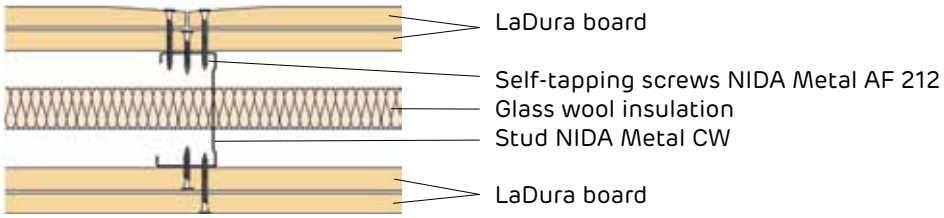
SYSTEM PERFORMANCE

SOUND INSULATION, ROBUSTNESS, FIRE RESISTANCE



Simple cladding systems

System	Board	Stud	Glass wool	Partition thickness [mm]	Sound insulation Rw[dB]	Robustness BS 5234-2	*Fire resistance EN 1364-1	Height max [m]
D100/75/60	LaDura 1x12.5	CW 75	25 mm 16 kg/m^3	100	48	Severe	EI 30	3.7
D105/75/60	LaDura 1x15	CW 75	no	105	41	Severe	EI 60	4
D105/75/60	LaDura 1x15	CW 75	25 mm 16 kg/m^3	105	49	Severe	EI 60	4
D105/75/60	LaDura 1x15	CW 75	50 mm 16 kg/m^3	105	50	Severe	EI 60	4
D130/100/60	LaDura 1x15	CW 100	25 mm 16 kg/m^3	130	50	Severe	EI 60	5
D130/100/60	LaDura 1x15	CW 100	50 mm 16 kg/m^3	130	51	Severe	EI 60	5



Double cladding systems

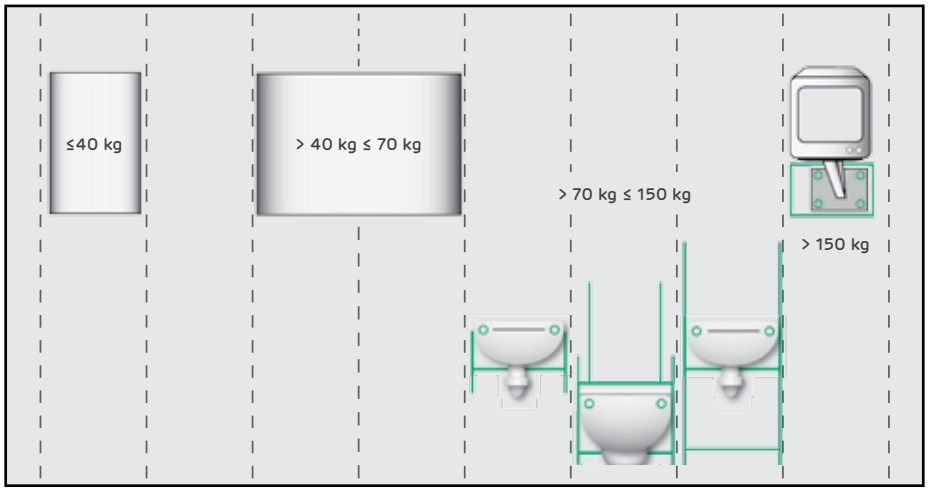
System	Board	Stud	Glass wool	Partition thickness [mm]	Sound insulation Rw[dB]	Robustness BS 5234-2	*Fire resistance. EN 1364-1	Heigh max [m]
D130/75/60	LaDura 1x15 + 12.5 Std	CW 75	25 mm 16 kg/m^3	130	56	Severe	EI 60	4.6
D125/75/60	LaDura 2x12.5	CW 75	25 mm 16 kg/m^3	125	56	Severe	EI 90	5
D150/100/60	LaDura 2x12.5	CW 100	25 mm 16 kg/m^3	150	57	Severe	EI 90	6.4
D135/75/60	LaDura 2x15	CW 75	25 mm 16 kg/m^3	135	57	Severe	EI 120	5.6
D160/100/60	LaDura 2x15	CW 100	50 mm 16 kg/m^3	160	58	Severe	EI 120	7.2
SL200/50/60	LaDura 2x15	CW 50	25 mm 16 kg/m^3	200	65	Severe	EI 120	6.4

For other system configurations, please contact the Technical Assistance Department of SINIAT or send your requests at siniat@siniat.com.

*For fire-resistant systems, contact the Technical Assistance Department of SINIAT.

SYSTEM PERFORMANCE

RECOMMENDED LOADS AND FIXING POINTS



Small loads			Other loads		
kg/m[1]	≤ 15	≤ 40	> 40 ≤ 70	> 70 ≤ 150	> 150
Board thickness	One board ≥ 12.5 mm	20 mm			Specific support elements
	Double board ≥ 12.5 mm				
Objects	Paintings	Shelves Paintings	Shelves Small wardrobes	WC support Sinks	
Fixing[2]	Cârlig fixare tablou Şurub AF	Anchors[2] in any point	Metal anchors: [2] In any point	Steel or wood crossbeams between studs	

[1] kg per linear meter of wall
[2] Distance between fixing points: max. 30 cm.

INSTALLATION

LaDura is easy and quick to install. Partition walls are finalized in only 4 steps:

1. Framing

LaDura plasterboard can be installed on steel and timber frame structures, with the studs set at maximum 600 mm centers The minimum thickness of the metal profiles on which LaDura board can be installed is 0.6 mm.

2. Fixing

Place the board on vertical position, at 5-8 mm from the floor. Screw fix the board with self-tapping screws AF 212 on metal profiles with the thickness 0,6÷0,8 mm, and with self-drilling screws on profiles with the thickness 0,8÷2 mm. Place the screws at distances of max. 30

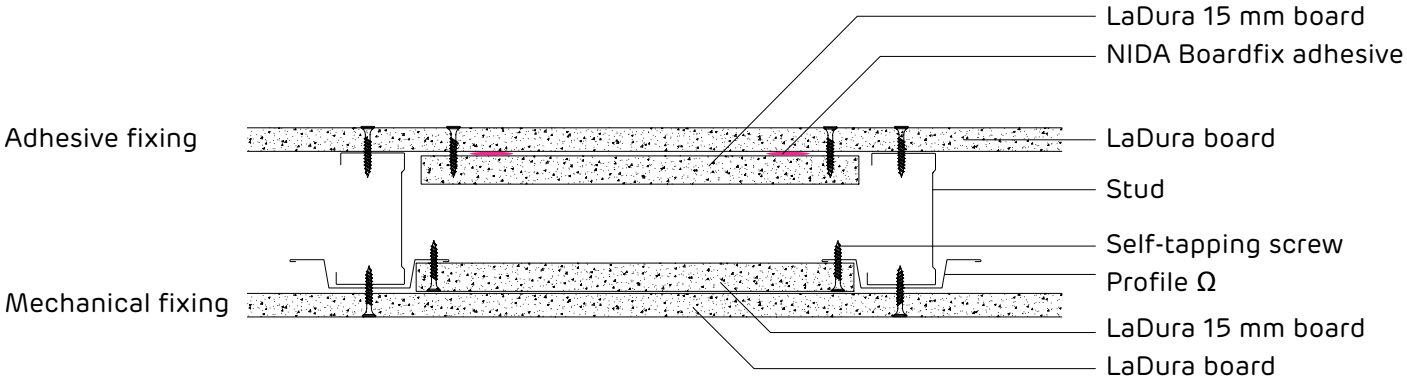
3. Skimming

If using skim plaster, first prime the board surface for uniform absorption.

4. Finishing

LaDura boards provides outstanding finish. Seal the joints as in the case of any usual plasterboard system, following the steps needed to obtain the desired finishing degree.

Pullout resistance - Fixing -

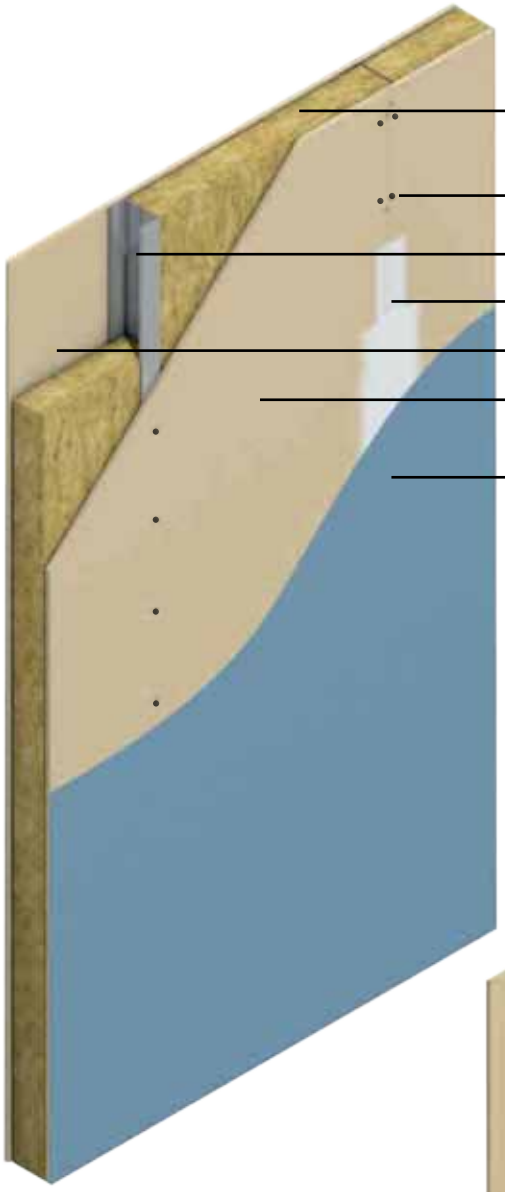


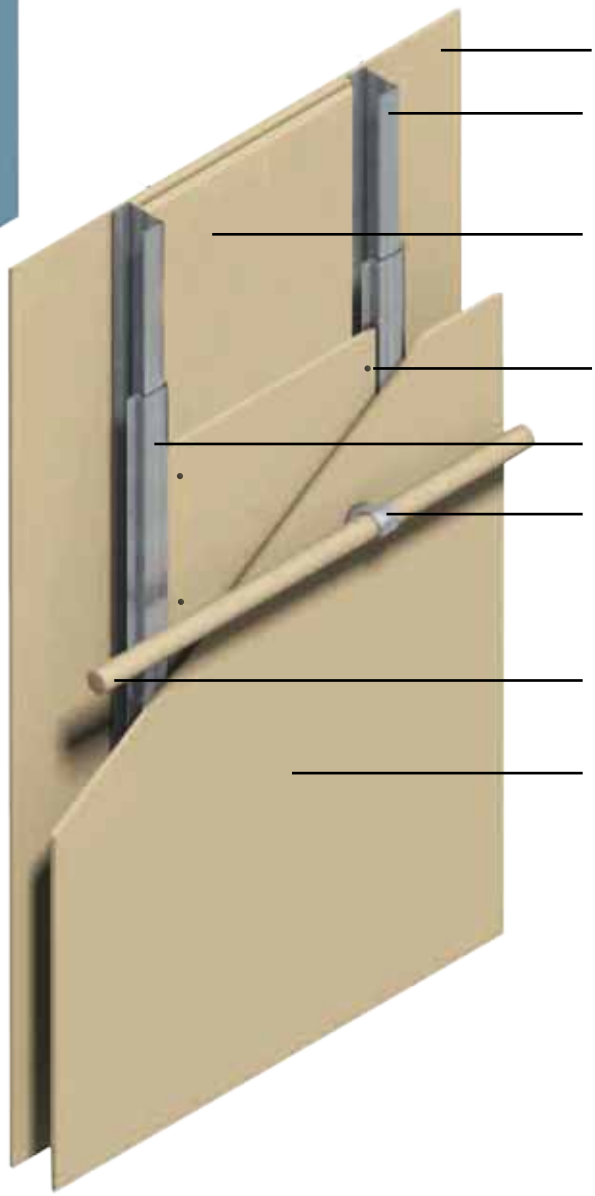
Pullout resistance - connection (kN)

For more detailed installation instructions, please contact the **Technical Assistance Department at: siniat@siniat.com**

Board arrangement	With additional LaDura 15 mm board			No additional board		
	Spit Driva®	Spit Molly	Spit Satelis	Spit Driva®	Spit Molly	Spit Satelis
Single layer 15 mm LaDura	0.4	0.85	1.8	0.25	0.5	0.85
Double layer 15 mm LaDura	0.5	1.15	2.85	0.4	0.85	1.8

CONSTRUCTIVE DETAILS OF A TYPICAL SYSTEM





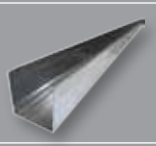
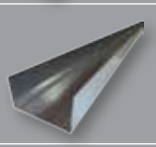
SYSTEM COMPONENTS

LaDura system offers you everything you need for projects meeting the highest professional standards:

LaDura board comes in two standard sizes or custom-made special lengths.

Thickness [mm]	Width [mm]	Length [mm]
12.5	1200	2000
15	1200	2400

You may reduce material consumption and optimize the final costs of your project by ordering LaDura boards adapted to your specific project requirements.

System components:	SAP Code	Length
LaDura board 	91934 91935	12.5x1200x2000 15x1200x2400
Self-tapping screw AF 212 	4042828 4042832 4042830 4042833 4042831 4042834	25 mm 55 mm 35 mm 70 mm 45 mm 90 mm
Self-drilling screw 	4042837 4042839 4042838 4042840	25 mm 45 mm 35 mm 55 mm
Profiles NIDA Metal CW (0.6 mm thickness) 	4042727 4042738 4042715	CW 50/3000 mm CW 75/3000 mm CW 100/3000 mm
Profile NIDA Metal UW (0.6 mm thickness) 	4042763 4042765 4042759	UW 50/3000 mm UW 75/3000 mm UW 100/3000 mm
Microperforated paper tape 	4042667 4042668 4042881	23 m 75 m 150 m
NIDA Boardfix bonding plaster 	91392	25 kg
-NIDA Profesional jointing plaster 	91389 91391	5 kg 25 kg
-NIDA PROFESIONAL FRESH JOINTING PLASTER 	91388 91390	5 kg 25 kg
Readymix Pro paste 	91108 91106	5 kg 20 kg

USEFUL INFORMATION

Handling and storage:

A high quality of the finish using LaDura boards can be obtained subject to complying with the following recommendations:

- the boards should be transported with their transversal edge in a vertical position, or using special adapted transportation means (carts, forklifts, trucks)
- the boards should be stored on pallets or wood spacers, placed at an equal distance of about 50 cm. The packs should be stored on dry and smooth floors. This type of storage prevents damage (deformation or breaking)
- the boards should be stored and installed inside, at temperatures between 5-45°C and relative humidity of max. 60%
- the boards which got moist during storage should be perfectly dried before installation. Thus, they should be placed vertically on a smooth floor, so that the air flows freely between them
- the boards should not be stored for long periods under direct sunlight
- during storage, account should be taken of the loadbearing capacity of the floor. E.g. 50 LaDura boards with the thickness of 12.5 mm place a weight of about 640 kg/m² on the floor; 40 LaDura boards with the thickness of 15 represent a weight of about 626 kg/m².

Composition

Aerated calcium sulphate dehydrate core, with hardwood and glass fiber inserts covered in tough paper with bound edges. The edge glue is polyvinyl acetate (PVA).

Physical properties

LaDura board is covered with a grey paper and is available in a range of thickness and lengths, with BA tapered edges.

Protection measures:

LaDura board is not classified as a product with a high hazard degree. Upon installation of the boards, the general health and safety rules should be observed. The installer should use proper tools and should wear a mask, gloves and goggles when cutting the board.

RESOURCE EFFICIENCY

- Like other boards classified according to EN520, LaDura mainly contains gypsum, a non-hazardous material, covered in a liner made 100% of recycled paper.
- The manufacturing process of LaDura boards has a low energy consumption, similar to the standard boards, with closed loop recycling of water and process wastes.
- A and A+ ratings are usually obtained according to BRE Green Guide, due to the use of high performance light metal systems.
- Often, one single layer of LaDura is sufficient to satisfy project requirements, with savings on materials, costs, waste and installation time.

SUSTAINABILITY

- LaDura is a product by SINIAT, a leader in providing sustainable innovative drywall solutions.
- Due to the addition of wood particles, the environmental impact of the board composition is significantly reduced.

ORDERS

Telephone: 021 334 96 08 /09
Fax: 021 404 39 95/96/97
Email: comanda.gips@siniat.com

TECHNICAL AND COMMERCIAL SUPPORT

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