

# WHAT IS PLADECK ? APPLICATION AREAS

Pladeck is a polymer product developed for concrete moulding in columns, floors, joists and all kinds of concrete mouldings. Pladeck is an ideal alternative product with its suitable cost, in compare to other concrete moulding systems such as plywood.





Mechanical properties of Pladeck are not dependent on duration of load. Different loads do not cause Pladeck to deform. Pladeck is non-flammable and not affected by water, humidity and weather conditions.





- 1 - The obtained surface is smooth with less flaws. It is ready for plastering of parish and painting.

- 2 - Pladeck is a light product which is easy to carry during mounting and dismantling.



- 3 - According to project requirements, Pladeck can be produced in different lengths.

- 4 - Pladeck is easily separated from concrete without using of any moulding oil which decreases cost and also prevent negative effects on concrete adherence due to the interaction of oil and iron.





- 5 - Pladeck is resistant to nailing, drilling and cutting effects. It is recommended using special wide capped Pladeck nail for ideal application.

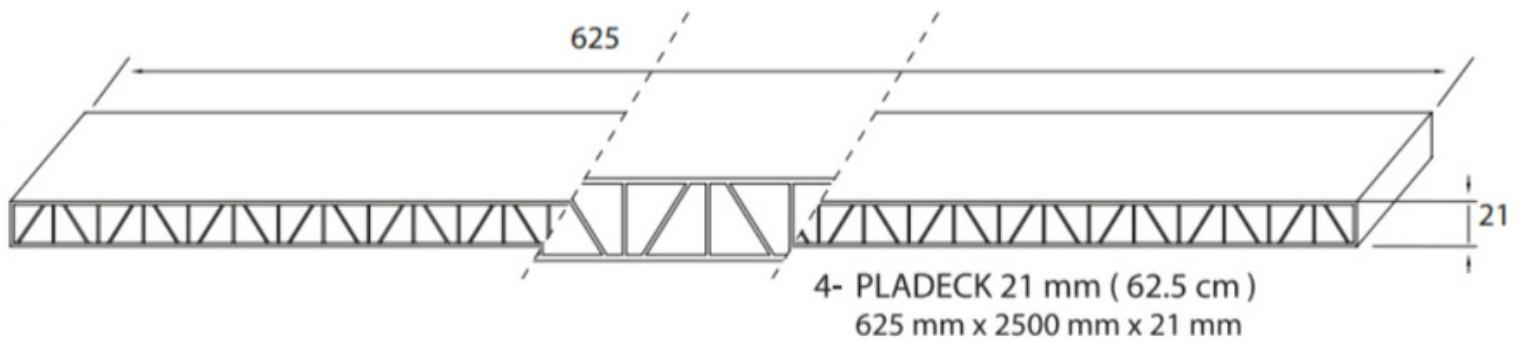
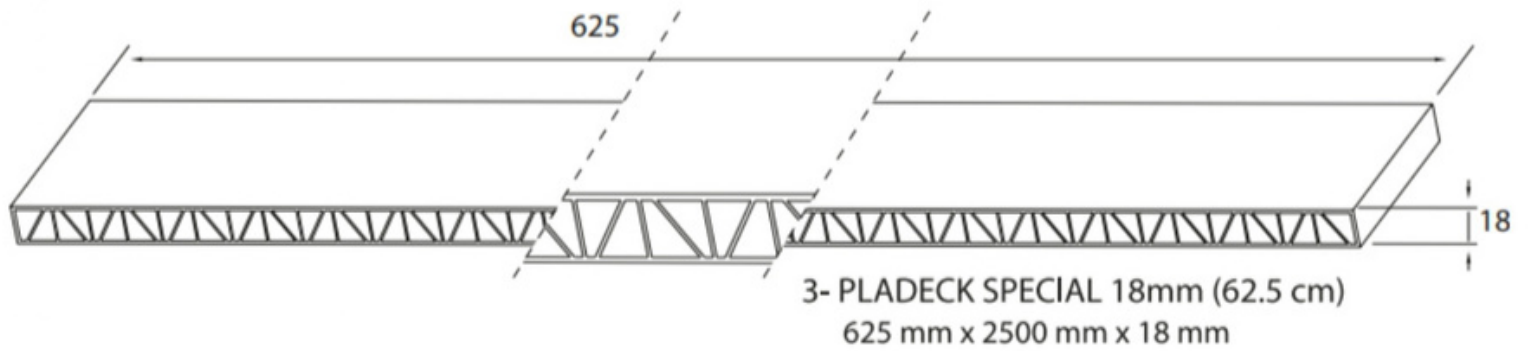
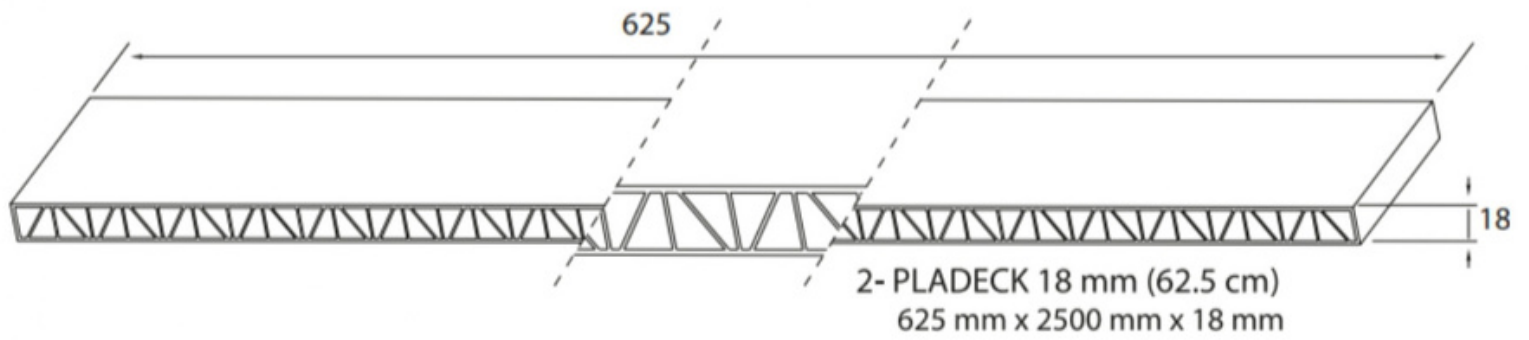
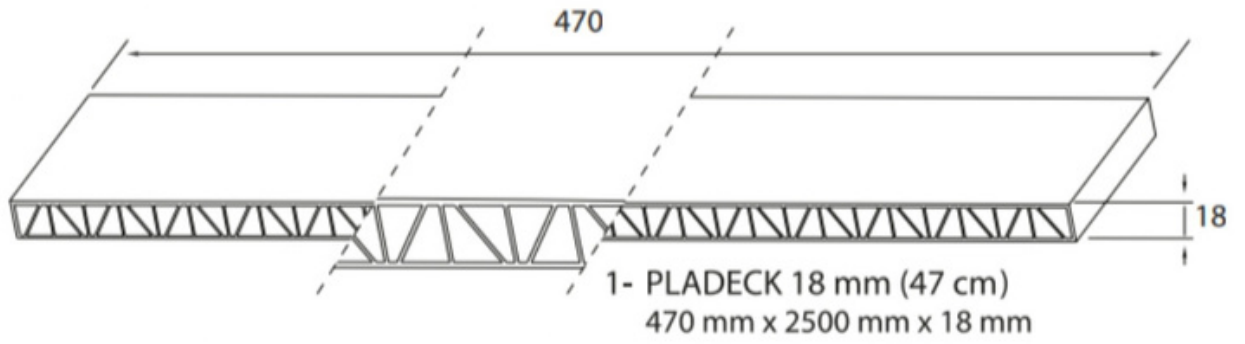
- 6 - Unlike plywood, it does not need to be painted. Pladeck does not need epoxy dye to get rid of water absorption.



- 7 - Pladeck is a long-life product. The number of re-use is larger than plywood's.
- 8 - The most important thing about Pladeck is to be a recyclable product. After last re-use, waste material and even small parts can be returned back to PVC waste producers.
- 9 - There is no cutting any trees to make Pladeck.



Not recyclable wastes Plywood.  
(An example in a construction site)



Note : Measurements in mm.

# SIDE PRODUCTS

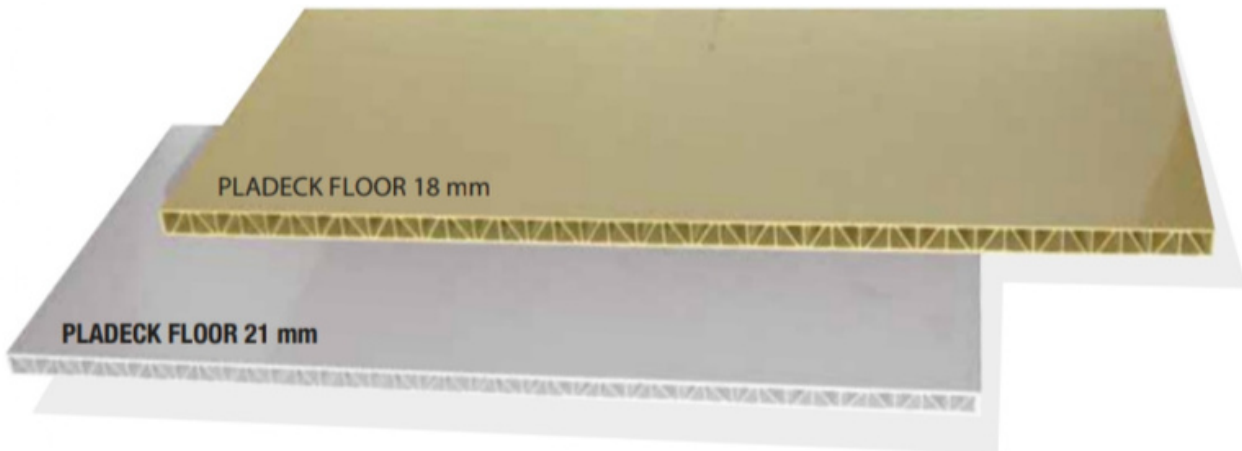
- 6- PLADECK NAIL  
Special Pladeck nail  
(wide capped)



Note : Measurements in mm.

# PRODUCTION AND PACKAGING

Our production is carried out in modern sites, with warranty of international quality standards ISO 9001 and ISO 14001.



## PLADECK 62,5

Plate Sizes	: 625 x 2500 x 18 mm
1 Plate area	: 1,5625 m <sup>2</sup>
1 Package	: 4 Plate (6,25 m <sup>2</sup> )
1 Bale	: 15 Package (60 Plate) (93,75 m <sup>2</sup> )
1 Pallet	: (30 Package = 120 Plate = 187,5 m <sup>2</sup> )
1 Truck	: 15 Pallet ( 1800 Plate = 2800 m <sup>2</sup> )

## PLADECK FLOOR 21 mm

Plate Sizes	: 625 x 2500 x 21 mm
1 Plate area	: 1,5625 m <sup>2</sup>
1 Bale	: 52 Plate (81,25 m <sup>2</sup> )
1 Pallet	: 104 Plaka (162,5 m <sup>2</sup> )
1 Truck	: 15 Pallet ( 2437.5 m <sup>2</sup> )

## PLADECK SPECIAL 62,5

Plate Sizes	: 625 x 2500 x 18 mm
1 Plate area	: 1,5625 m <sup>2</sup>
1 Package	: 4 Plate (6,25 m <sup>2</sup> )
1 Bale	: 11 Package (44 Plate) (68,75 m <sup>2</sup> )
1 Pallet	: 2 Bale (22 Package = 88 Plate = 137,5 m <sup>2</sup> )
1 Truck	: 15 Pallet ( 1320 Plate = 2060 m <sup>2</sup> )

## PLADECK 47

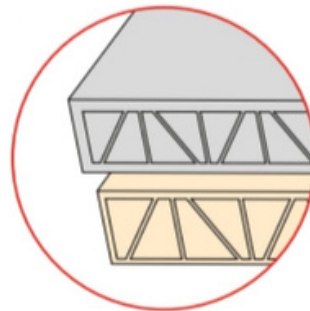
Plate Sizes	: 470 x 2500 x 18 mm
1 Plate area	: 1,175 m <sup>2</sup>
1 Package	: 4 Plate (4,75 m <sup>2</sup> )
1 Bale	: 15 Package (60 Plate) (70,5 m <sup>2</sup> )
1 Pallet	: 2 Bale (30 Package = 120 Plate = 141 m <sup>2</sup> )
1 Truck	: 20 Pallet ( 2400 Plate = 2820 m <sup>2</sup> )



Loading



Packaging



4 plates wrapping



1 Pallet

# DETERMINING MECHANICAL PROPERTIES OF PLADECK POLYMER CONCRETE MOULDING SYSTEMS AND PREPARING TABLES FOR APPLICATION

## TECHNICAL REPORT

- In case of vertical applications (columns etc...) of PLADECK SPECIAL: with 3-mm-thickness and 30 m/h concrete loading speed, fresh concrete pressure on the mould surface will be 75 kN/m<sup>2</sup>. In this case, deflections formed in 30-cm-support-gap are within the defined limits.
- In comparison with wooden moulds, Pladeck does not absorb water. Therefore, less water will be used in concrete hydration. This will affect positively the durability of concrete.
- Pladeck moulding systems can be used safely by using tables and graphics obtained from this experimental study.

## SUBJECT

Determining mechanical properties of Pladeck polymer concrete moulding systems and preparing tables for application.

## PURPOSE

Experiments have been carried out in material laboratories of Istanbul Technical University at the Faculty of Construction to determine mechanical properties of Pladeck polymer concrete moulding system. Experiments are classified in two groups. In the first group: characteristic properties are determined such as elasticity module, endurance against leakage and rupture. In the second group: loading experiments are done on different support gaps to obtain loading capacity and deflection values. Characteristic values obtained from those experiments are used in theoretical calculations to form the calculation tables.

## Loading experiments

Loading experiments are done on Pladeck plates with 18-mm-thickness and 62,5-cm-width. Flexure experiments are done to obtain flexure values in vertical and horizontal applications. In both cases, experiments are carried out with 3 examples of 3 different support gaps.



## Way of effective application

Flexure experiments on different support gaps are done to obtain flexure values in vertical application. Therefore, important structural properties such as load interchange, maximum vertical load values, deflection values and collapse shapes are obtained.

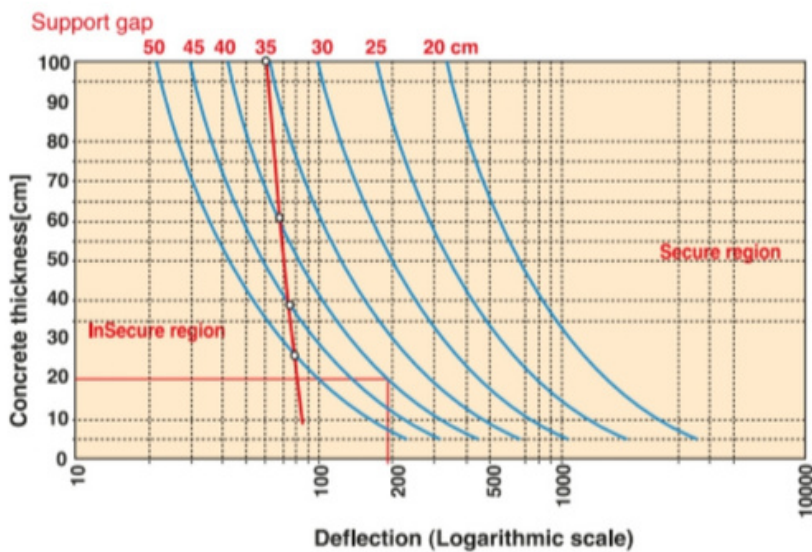
As a result, it is accepted that support is applied vertically in order to achieve an effective application of Pladeck.



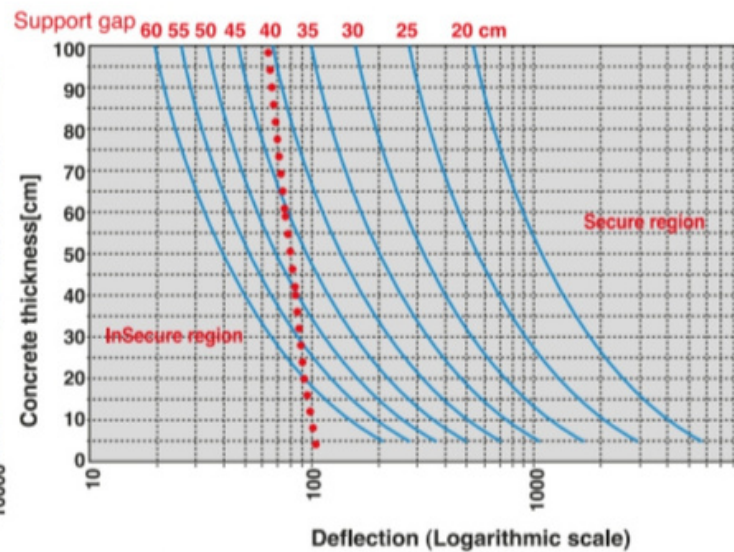
# SECURE USAGE TABLES WHEN USED AS FLOOR COVERING MOULD

## FLOOR COVERING CLASS 1 Floors with template, industrial grounds

Pladeck floor



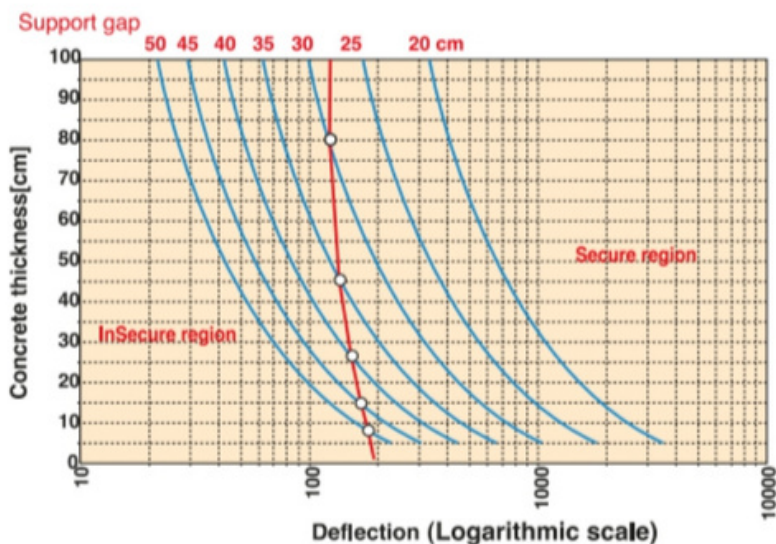
Pladeck special



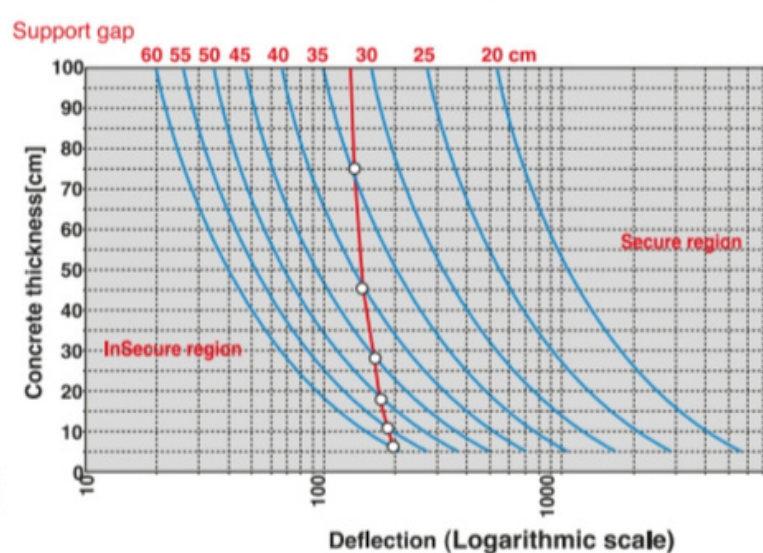
## FLOOR COVERING CLASS 2 Coated floors, clad surfaces, ceramic coated floors, adhesion surfaces

Coated floors, clad surfaces, ceramic coated floors, adhesion surfaces

Pladeck floor



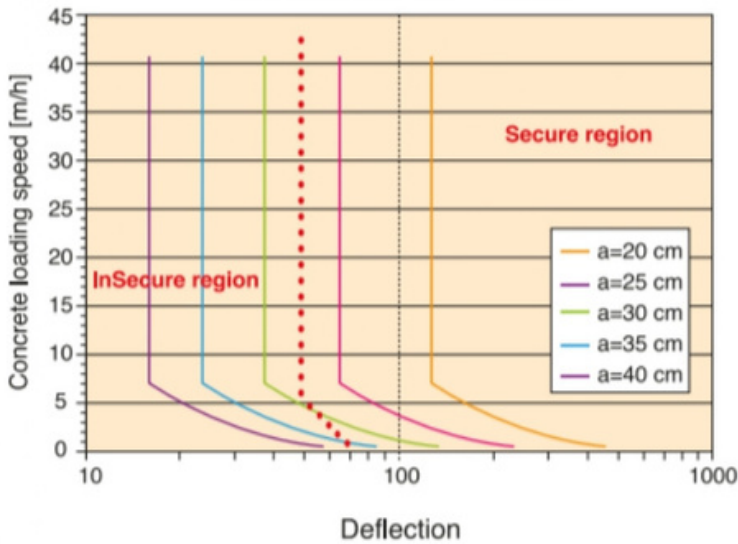
Pladeck special



# SECURE USAGE TABLES WHEN USED AS VERTICAL CONCRETE MOULD

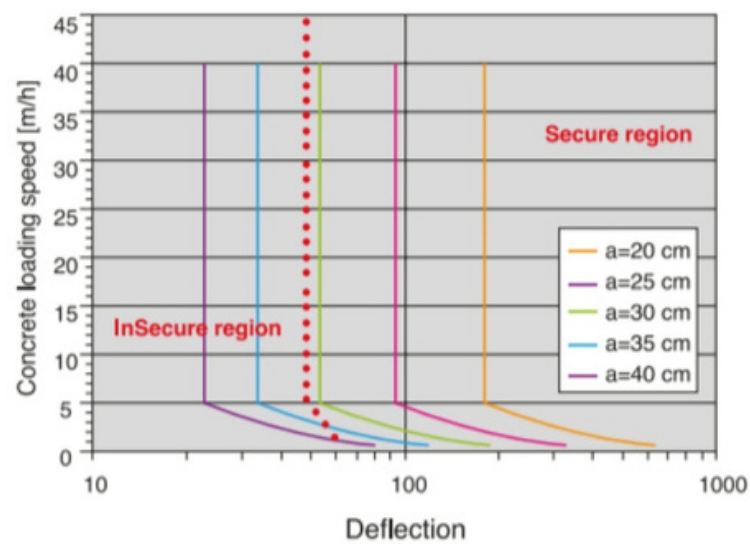
Pladeck

MOULD DEPTH = 3.5 m

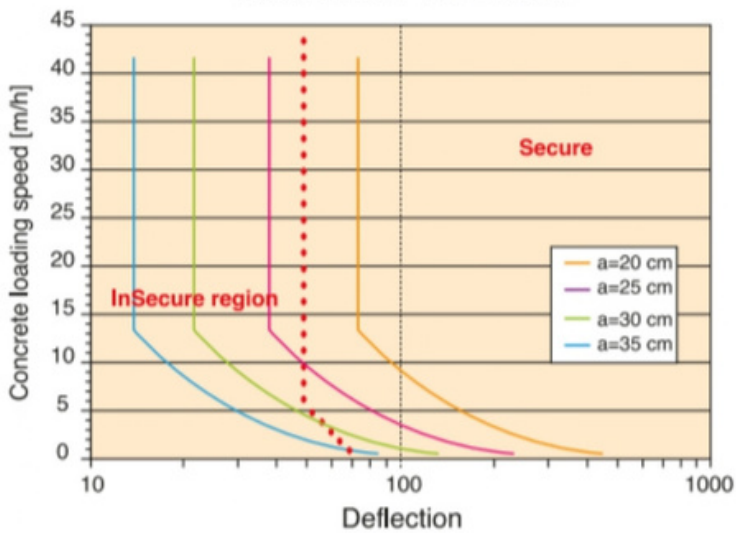


Pladeck special

MOULD DEPTH = 3.5 m



MOULD DEPTH = 6.0 m



MOULD DEPTH = 6.0 m

