

# TECHNICAL SPECIFICATIONS USER MANUAL FOR INSTALLATION, USE, MAINTENANCE AND CONTROL OF THE EQUIPMENT

Company: IMPRESIA 99 LTD

Combined children play facility, model КД31



## I. TECHNICAL SPECIFICATIONS

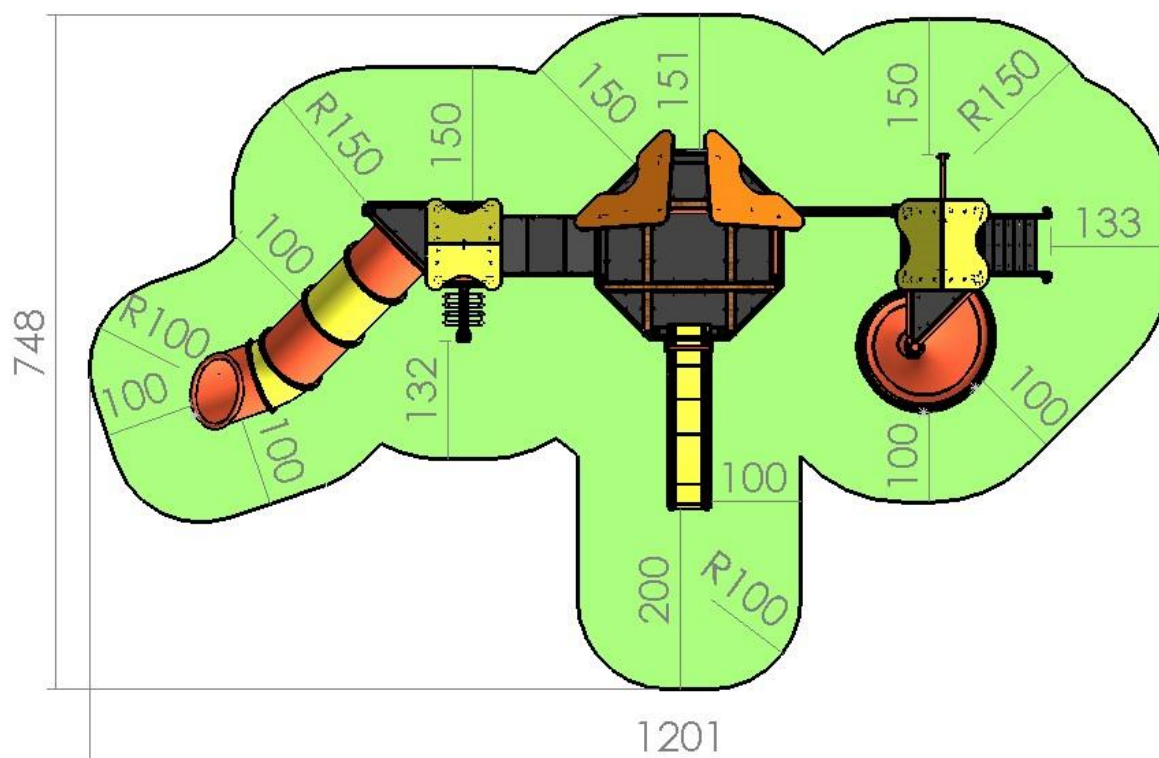
### 1. General Characteristics

Model	<b>КД31</b>
Age group	3 - 12 y. o.
Maximum free fall height	150 cm
Maximum number of users	20
Size of the facility	968 x 397 x 312 cm
Safety zone	63 m <sup>2</sup>
Types of games	Climbing, sliding, balancing
Admissible surfaces for the fall area	Grass, sand, shock-absorbing synthetic surface
Standards compliance	BS EN1176-1, BS EN1176-3
Warranty period	24 months

## 2. Dimensions of the Equipment and Minimum Space for Placemen



**Зона на падане - 63 м2**



## 3. Materials Used

- The structural elements are produced of selected dried double layer softwood with the appropriate profile. Their technical and operational characteristics correspond to the loads required during the operation of the equipment. The equipment structure is designed in accordance with the EN1176-1 requirements both in terms of the fixed and variable loads depending on the number of users in the particular area, and in regards with all requirements of this standard for protection against falls and protection against all types of clamps. The structure is certified by Construction Declaration and in-house Test Reports. All parts are round, with a radius of less than 3 mm, and are polished, impregnated and varnished with three layers of environmentally-friendly acrylic varnish suitable for outdoor conditions (attested by a varnish certificate). The joints are covered by galvanized metal threaded lining with countersunk heads and cannot be disassembled without the use of a special tool. All other metal parts and components of the equipment are protected against weather conditions by non-toxic coatings.
- The slides are made of multi-layer fiberglass resistant to UV rays and have the adequate strength required for their use by children of the specific age group. They are smooth, easy to be cleaned and have no sharp edges and protrusions. The slides are accompanied by the required Declaration of Conformity prepared on the basis of the Test Report for compliance

with the requirements of BS EN 71-3 (“Safety of Toys - Migration of Certain Elements”) issued by an accredited laboratory.

- The roofs of the children playhouses have water resistant plywood. They are designed to withstand the required load of snow, wind and temperatures.
- The swings are mounted to the structure through a metal lining with replaceable nylon bearings with high rigidity. The seat is suspended through a metal chain; the suspension complies with the specific requirements of BS EN 1176-2, evidenced by the quality certificates of the lining and chain. The swing seats are made of high density polyethylene. They are lightweight and provide low levels of acceleration and low surface pressure, as required by the same standard. The surrounding elements of the young children seats are made of aluminum tube with rubber coating and prevent the sliding of the child through the seat frame. The structure of the swing is designed and tested for the required static and dynamic loads, as attested by Construction Declaration and in-house Test Reports.
- The sports facilities are made of aluminium pipes with the required size and strength.
- All modules of the equipment, which include cable components, are made of special multi-wire rope with a diameter of 16 mm and suitable polyamide mesh. The rope is attached by steel plating and aluminium press sleeves (Quality Certificate of the rope and plating issued by the manufacturer).
- The plywood used in the production features maintains the required water resistance and has a three layer acrylic varnish coating with UV protection.
- The structural elements are produced of steel pipes and plates with the appropriate profiles. Their technical and operational characteristics correspond to the loads required during the operation of the equipment. The equipment structure is designed in accordance with the requirements of EN1176-1 both in terms of the fixed and variable loads depending on the number of users in the certain area and in regards with all requirements of this standard for protection against falls and all types of clamp. The structure is certified by a Construction Declaration and in-house Test Reports. All parts are covered with a three layer corrosion resistant primer and environmentally-friendly acrylic varnish suitable for outdoor conditions (attested by a varnish certificate). The joints are covered by galvanized metal threaded lining.
- The slides are produced by stainless steel grade 304, and volume waterproof plywood with special treatment of the edges for better durability. The slides are smooth, easy to be cleaned and have no sharp edges and protrusions. All modules of the equipment, which include cable components, are made of special multi-wire rope with a diameter of 16 mm and suitable polyamide mesh. The rope is attached by steel plating and aluminium press sleeves (Quality certificate of the rope and plating issued by the manufacturer).

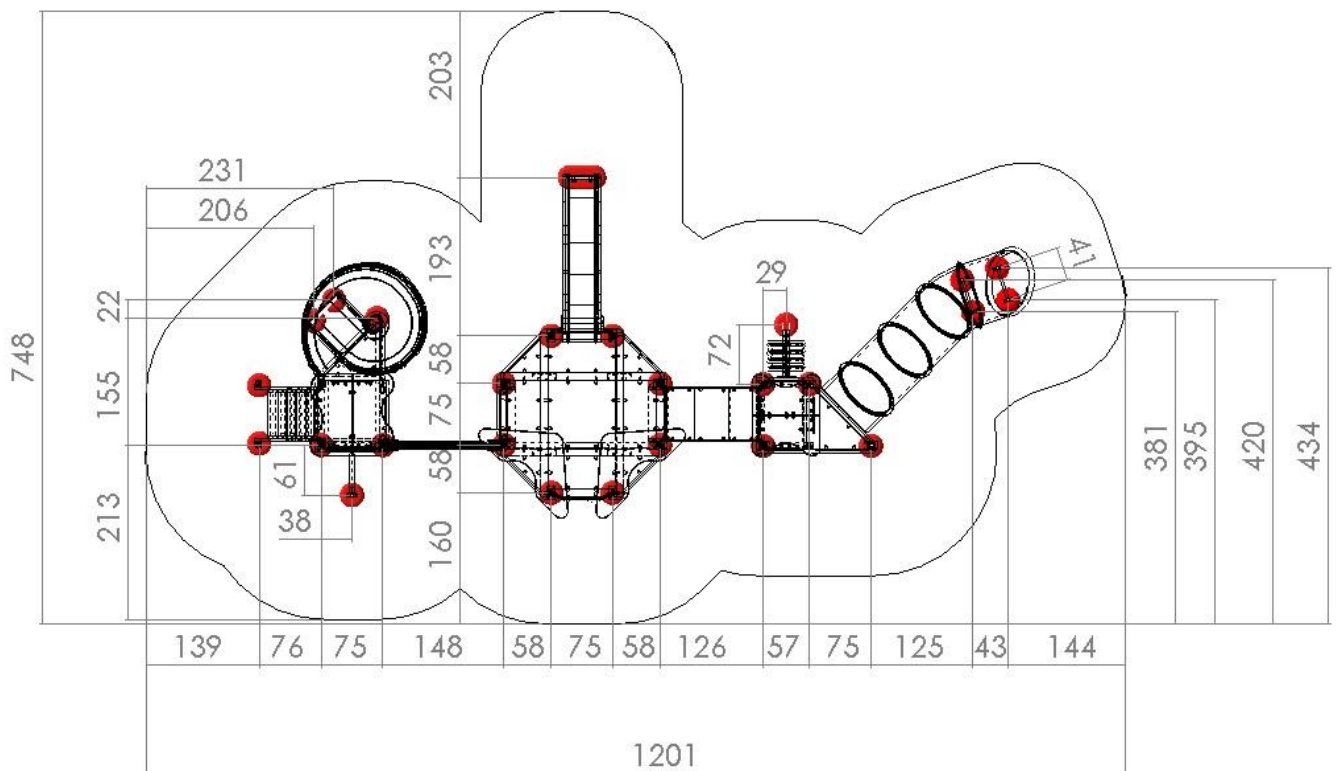
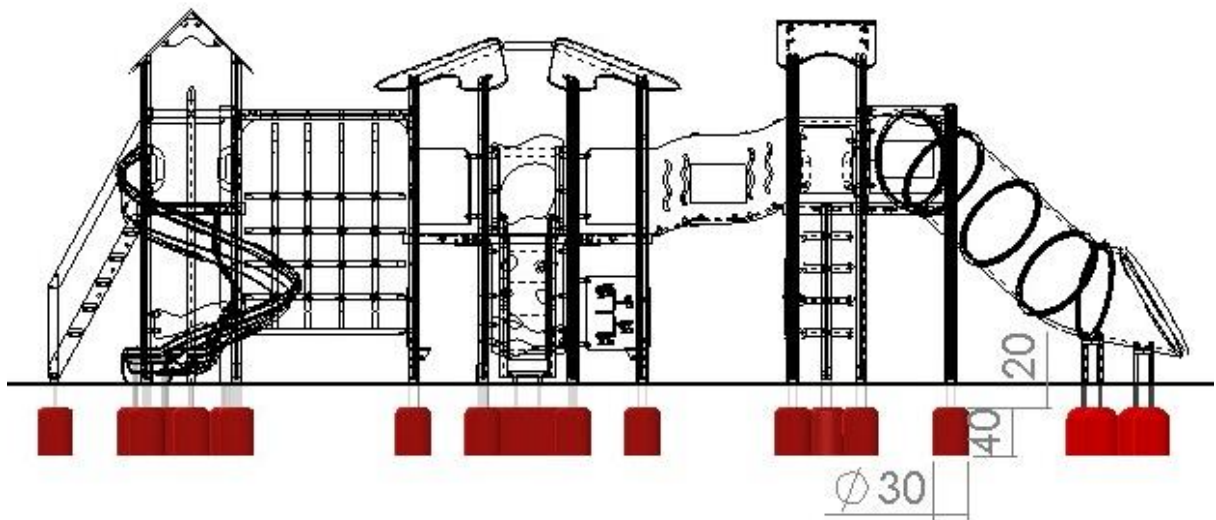
## **II. INSTRUCTION FOR INSTALLATION OF THE EQUIPMENT**

The installation of the equipment to the existing terrain is performed as follows:

When installing on a reinforced concrete slab with a thickness of at least 10 cm (according to the constructive opinion of the equipment), the installation is performed by certified segmented anchors. After tightening the anchors, the protruding part is cut out and, after applying the impact absorbing rubber covering, the entire anchoring zone is covered and aligned with the covering with a special rubber jointing mixture.

When installing on a lawn or a terrain with bulk covering (sand or chips), attachment of the equipment is performed by cement stabilization with concrete foundations according to the foundation plan below. The connection of the structure and the concrete foundations is made by metal pillars with welded reinforcement in the area of the foundation. Depending on the type of equipment, these embedded items are a continuation of the supporting pillars (when the equipment has a metal structure) or are a separate element connecting the wooden structure to the foundations. In the case of bulk impact absorbing covering, the supporting metal pillars are stretched depending on the thickness of the covering, so that the foundations can be casted into solid support soil. After

the installation of the equipment, the concrete foundations are covered with soil or bulk covering to the level of the terrain.



### III. OPERATING AND MAINTENANCE INSTRUCTION OF THE SLIDE EQUIPMENT

1. The commissioning of the installed equipment by cement stabilization with concrete foundations shall be performed after the final maturing of the concrete (not less than 48 hours after its washing).

2. The use of the equipment is unacceptable prior to providing the foreseen in the project corresponding impact absorbing covering and the minimum fall and play area provided in this Technical Specification.

3. In order to achieve a longer operating life, it is necessary to perform periodic maintenance of the equipment.

- Despite the fact that the wood used for production is selected and dried, it is a natural material that is expected to expand and collapse over time and it is therefore necessary in the

periodic checks described below to check the tightness of the bolt connections and in case of necessity to be tightened.

- It is necessary to periodically clean the equipment from sand and other solid particles, which accelerate the wear of the horizontal or sloping surfaces.

#### **IV. GENERAL INSTRUCTIONS FOR MAINTENANCE OF THE EQUIPMENT**

> According to BS EN 1176 and Ordinance № 1 of January 12<sup>th</sup>, 2009 on the Terms and Conditions for Playgrounds Structure and Safety (State Gazette, issue 10/2009) the equipment is subject to regular, periodic and annual monitoring.

- The regular monitoring is carried out by the owner of the playground once every 7 - 10 days in order to examine for any obvious dangers.

- The periodic monitoring is carried out by the owner of the playground once every 1 - 3 months depending on how often the playground is visited. The periodic monitoring is carried out for the purpose of detailed examination of the functioning and stability of the play facilities due to their wearing.

- The annual monitoring is carried out for the purpose of complete and detailed examination of the overall level of safety on the playground, which should comply with the requirements of the above-mentioned Ordinance.

> In case of any troubles, measures to eliminate the identified hazards and risks for the safe operation of the playground should be taken.

#### **V. GUARANTEE CARD**

The warranty period of the product is 24 months from the date of installation.

The warranty period of the performed construction and assembly works - sanding with concrete foundations or anchoring on a reinforced concrete slab is 5 years from the date of commissioning of the site.

The operating period of the product is significantly longer than the warranty period and is largely dependent on the periodic maintenance of the equipment described in the operating instructions and the technical specification.

##### **The warranty period covers the following defects:**

- Defects of poor manufacturing quality of the product
- Defects of poor quality materials
- Defects due to poor installation

##### **Product warranty does not apply in the following cases:**

- If the product is assembled or installed in a manner contrary to the manufacturer's instructions (when installed by the customer)
- Damages to the product caused by vandalism
- Damages caused by improper use not in accordance with the manufacturer's recommendations stated in the operating instructions
- If the buyer has not performed the necessary checks and maintenance of the product in accordance with the manufacturer's recommendations stated in the operating instructions
- In the case of normal wear and tear resulting from the use of the product for its intended purpose, such as scratches, dents, abrasion, fading, cosmetic problems of surface corrosion, micro cracks in wood not affecting the strength and safety of the product.
- Hidden defects in installation work in anchoring due to a poorly executed concrete foundation (slab) by the client. Such a problem may occur with insufficient covering thickness or poor quality concrete.

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For company: "IMPRESIA 99" OOD