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AUSTRIA

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I. DRAWINGS, DIMENSIONING, AND CALCULATIONS:

Rindler GmbH is a trading company. Any dimensioning, drawings, and/or calculations provided to prospective customers free of charge as a part of our service merely represent suggestions for designs to be implemented in fibre reinforced concrete for the relevant planning engineers or users. By no means do they serve as a substitute of structural calculations and dimensioning that may be required by law. Therefore, they must, where applicable, be checked by the competent civil and/or structural engineering firms prior to the start of any construction work and must have been approved by them for the respective project and the respective application, respectively. In each of these cases, users must verify whether or not such a legal requirement exists. All project-related specifications with respect to loads, subsoil, etc. were provided to us and must be verified by the user.

We do not assume any warranties for services provided by third parties and passed on identified as such to the customer.

II. USE:

In the case of so-called „white tanks“ (waterproof underground concrete structures), water pressure, slope pressure, or retaining walls, it is not possible to rely solely on the use of reinforced fibre concrete. All the required starter reinforcements and additional reinforcements, as well as lintel reinforcements for windows and doors, must be implemented in a conventional manner. Foundations, inset corners and edges, sawn joints, and navigable margins must be provided with additional reinforcements according to the specifications defined by the responsible structural engineer/designer. In the region of the columns, an additional reinforcement along the edges in the form of a mesh strip must be provided for in planning. Adherence to the usual concreting sections is mandatory. In addition, the joint cuts must be implemented in strict compliance with the specifications provided by the responsible structural engineer/designer. Furthermore, attention must be paid to ensure that any point loads are spaced at least 30 cm from cut joints. Otherwise, additional reinforcements and doweling specified by the structural engineer will also be necessary in this case.

The apparent joints of the „segments“ must be incised as early as possible in order to avoid uncontrolled cracking. An apparent joint depth of 1/3 of the slab thickness must be observed. In addition, an adequate follow-up treatment in conformity with „standard building rules“ must be carried out.

The structurally necessary reinforcement for retaining wall systems and for the dissipation of horizontal forces encountered in halls, stables, or equestrian arenas, etc., must be implemented according to the specifications provided by the project-managing structural engineer. The relevant concrete cross-sections must be as specified in the structural engineering drawing. The applicable processing standards and guidelines must be observed.

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All specifications and instructions provided by the respective fibre manufacturers are based on the assumption that the stability of any and all superstructures and installations is ensured. Generally, this refers to shelf legs (or the like), for example, that are connected to the floor slab by means of a base plate and an anchor. The relevant certificates and other supporting documents must be furnished by the respective manufacturers of the anchoring systems where necessary.

III. FIBRE PRODUCTS FOR CONCRETE REINFORCEMENT:

Concrete fibres used in combination with various different chemical additives may feed air to concrete. This must, where necessary, be examined by the user prior to concreting by means of a suitability test. Dosage and choice of product can have an impact on the concrete's consistency.

Fibre products are made in compliance with the applicable standards and are used according to the specifications and instructions provided by the respective manufacturer (original product data sheets). Under these standards, any deviations in fibre length, width, and diameter are possible as a result of the manufacturing process. Depending on the product and the dosage, the presence of fibres on the building component's surface cannot be ruled out.

Steel fibres: Typically, steel fibres are integrated in quantities of at least 20 to no more than 40 kg per cubic meter of concrete. Particularly in connection with higher fibre dosages, special care must be taken during processing, especially during 'smoothing'.

Macrosynthetic PP-fibres: Enduro HPP fibres have low specific gravity (0.91). When smoothing the concrete surface, it is necessary to exercise special care. Any possibly visible fibres at the surface can be flame-scarfed without difficulty. Enduro HPP45 fibres are restricted suitable for the construction of monolithic floors – please contact our technical service for further information.

Microsynthetic PP-fibres: Microsynthetic PP fibres are mainly used to optimize shrinkage and to minimize the risk of the formation of shrinkage cracks. Due to their surface, microsynthetic PP fibres bind liquid in concrete. Thus, the consistency of the concrete must, in any event, be discussed prior to concreting or when ordering the concrete, as applicable.