

Specification Suggestion

“Walkway” with Floradrain® FD 25

SPEC NOTE:

This guide specification gives general information about the ZinCo walkway assembly. It has to be clear, that the information that is shown must be understood as guide and recommendations.

It is possible that your walkway project need special technical requirements. Please contact us for further information regarding technical advice, specifications and budget cost.

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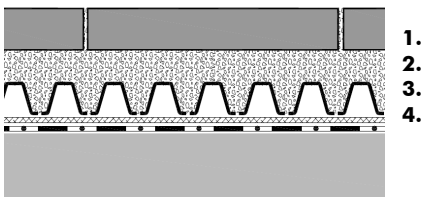
PART 1 – GENERAL

TECHNICAL DATA

Depth:
>100 mm (>4")

Slope:
2-5 degrees

SECTION



Section includes:

1. Hard Surfacing
2. High Performance Bedding (HPB)
Depth: >30 mm (1.2")
3. Drainage Element ZinCo Floradrain®
FD 25
4. Protection Mat ZinCo SSM45

5. Related Materials:

- Facade grill / Trench drain ZinCo FR, ZinCo FTR, ZinCo BTR
- Terrace grill (Area drain) ZinCo TR-H

REFERENCES

- The ZinCo “Walkway” assembly meets or exceed the requirements of the FLL-standards (Guideline for Planning, Execution and Upkeep of Green-Roof Sites, Release 2008).

DEFINITIONS

- Walkways and Driveways on top of roofs and decks that allow heavy live loads. Heavy live loads demand high quality protection and drainage mats.

SUBMITTALS

- Submit signed shop drawings showing that the roofing system, walkway assembly, materials, perimeter and penetration details and fall protection are accepted by the walkway manufacturer to ensure that the walkway assembly meets the necessary performance requirements.
- Submit a certification showing that all the components of the walkway assembly are supplied and warranted by the walkway manufacturer.
- Submit an inspection report, signed by the roof contractor and the walkway contractor, resulting from the quality control of the roofing system installation prior to the installation of the walkway assembly indicating that the roofing system is installed correctly.
- Submit references which indicate that the walkway manufacturer as well as the walkway contractor has recently successfully completed projects of similar scope and nature.

QUALITY ASSURANCE

- **Installers Qualifications:** Work of this section shall be installed by a recognized green roof or landscape contractor, approved by ZinCo Canada Inc. The contractor shall have adequate equipment, skilled workers with extensive practical experience, skills and knowledge.
 - Roof details such as flashing, roof edges, roof penetrations, outlets, roof fall and type of insulation must be adjusted to the walkway assembly used. ZinCo Canada Inc. provides consultation and engineering to (landscape) architects, roof contractors and green roof contractors to finalize these adjustments before construction of the roof commences, if requested.
 - Prior to the installation of the walkway assembly, test the water tightness of the roofing system by flood testing for at least a 48 hour period or an electronic leak detection process performed by a qualified testing agency.
 - Submit documentation certifying that the load bearing capacity of the roof and building construction is tested and approved by an structural engineer, with regard to the extra weight of the walkway assembly.
- ### ENVIRONMENTAL CONDITIONS
- Provide a temporary fall protection (safety railing or fall arrest) during the installation to ensure a safe and healthy work environment.
 - Provide a permanent fall protection (safety railing or fall arrest) for maintenance to ensure a safe and healthy work environment.

DELIVERY, STORAGE & HANDLING



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- By storage on the roof makes sure that the load of the materials does not exceed the load bearing capacity of the roof and building construction
- Store the materials in a dry area, out of direct sunlight, protected from freezing, staining or damage.

WARRANTY

- Submit a 5-year product manufacturing warranty according to the specifications of the green roof manufacturer which warrants all the components of the green roof assembly. (except the vegetation)
- Submit a 2-year workmanship warranty which warrants the installation of the green roof system according to the specifications.

MAINTENANCE

- Provide a maintenance program for the duration of two seasons as per following maintenance measures:
 - Six visits in the first year.
 - Six visits in the second year.
 - The removal of unwanted plants from borders, edges or joints;
 - The removal of litter;
 - Replacing damaged pavers or relaying paver with excessive settlement;
 - Checking the drains;
 - Cleaning.

Submit maintenance report to the owner at the end of the growing season.

PART 2 - PRODUCTS

Specified green roof assembly:
ZinCo Floradrain® FD25: Sedum Carpet

Supplier:

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1. SEPARATION/PROTECTIVE LAYER

(PLEASE CHOOSE CONVENTIONAL OR INVERTED ASSEMBLY)

(CONVENTIONAL ROOF ASSEMBLY)

- **ZinCo moisture retention and protection mat SSM45** made of recycled non-rotting fibers for water- and nutrient retention as well as a protection layer. Thickness: 5 mm. Weight approx. 470 g/m². Water retention capacity: 5 l/m². Bitumen resistant – Biologically and Chemically neutral. Penetration resistance: > 2400N. Tensile strength length wise: >8.5 KN/m .

Or

(INVERTED ROOF ASSEMBLY)

- Air and vapour permeable membrane **ZinCo diffusion membrane TGV21** made of thermal consolidated Polypropylene. Bitumen resistant – Biologically and Chemically neutral. Vapour opening size $S_d \leq 0,01$ m) Thickness: 0,55 mm. Weight: 80 g/m². To be used as separation layer on inverted roofs and protection against small particle infiltration.

2. DRAINAGE LAYER

- **ZinCo Drainage element Floradrain® FD25-E** made of 100% thermoformed recycled polyethylene, with openings for aeration and diffusion as well as a multidirectional drainage channel system on the underside. Bitumen resistant – Compressive strength: 270

kN/m². Weight: approx. 1,7 kg/m².
Dimensions: 1.00 x 2.00 x 0.025 m.

3. BEDDING MATERIAL

- **High performance bedding material (HPD)** made of angular, washed limestone material that is both free draining and self compacting. Size: ¼" clear.

4. HARD SURFACING

- **Concrete or natural stone** determined according to load-bearing capacity demand and the requirements of the relevant standards.
- To infill the joints of the paving a suitable Joint Infill Material has to be used. Grading adapted to bedding layer. The material must comply with the local standards and regulations. Delivery and installation in the paving.

1. RELATED PRODUCTS

- **Facade grill / Trench drain ZinCo FR, ZinCo FTR, ZinCo BTR** Adjustable trench drain with grill for foot traffic.
- **Terrace grill (Area drain) ZinCo TR-H** – Vertically adjustable terrace grill made of galvanized steel.

(PLEASE CHOOSE THE REQUIRED GRILL OR TRENCH DRAIN)

PART 3 – EXECUTION

1. INSPECTION

- Clean up the waterproofing membrane carefully (well-swept)
- Careful inspection of the waterproofing membrane including seams, penetrations and details after flood testing or electronic leak detection. If the waterproofing system and the Walkway Assembly are not carried out by the same company, the acceptance of the method used for



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waterproofing quality should be agreed by all the parties. Identified defects are to be reported in written form. Do not proceed until corrected.

bedding material equally to the required depth with a minimum of 50 mm. Check the depth on several places to ensure the right thickness. A tolerance of 1 cm is acceptable. Compact the bedding material with a roller.

2. SEPARATION / PROTECTIVE LAYER

(PLEASE CHOOSE CONVENTIONAL OR INVERTED ASSEMBLY)

(CONVENTIONAL ROOF ASSEMBLY)

Deliver and install the **ZinCo moisture retention and protection mat SSM45** directly on the top of the root barrier with a minimum overlap of 100 mm, according to the manufacturer's instructions. The separation sheet must be installed above the bedding material along the edges and at roof penetrations.

Or

(INVERTED ROOF ASSEMBLY)

- In the case of an inverted roof: Deliver and install the **ZinCo diffusion membrane TGV21** directly on the top of the insulation with a minimum overlap of 100 mm, according to the manufacturer's instructions. The separation sheet must be installed above the bedding material along the edges and at roof penetrations.

3. DRAINAGE STORAGE LAYER

- Deliver and install the **ZinCo Drainage element Floradrain® FD25-E** directly on the protection mat or diffusion membrane according to the manufacturer's instructions. Install the Floradrain elements butt jointed with the evaporation holes facing down and cut the drain elements in place along the edges and roof penetrations.

4. BEDDING MATERIAL

- Deliver and install the **High Performance Bedding material** on the drainage layer. Spread out the

5. HARD SURFACING

- Deliver and install the hard surfacing on top of the bedding material according to the manufacturer's instructions.

6. RELATED PRODUCTS

- Deliver and install **Facade grill / Trench drain [ZinCo FR, ZinCo FTR, ZinCo BTR** – Choose the required one] on top of the bedding material according to the manufacturer's instruction. Adjust the grill to the required height. Cut the hard surfacing tight around it.

- Deliver and install **Terrace grill (Area drain) ZinCo TR-H on top of the bedding material or drainage layer** according to the manufacturer's instruction. Adjust the grill to the required height. Cut the hard surfacing tight around it

7. COMPLETION

- Upon completion, leave the site in a neat, clean and workmanlike condition.

8. MAINTENANCE

- Execute the maintenance program as described on page 2.

END OF SECTION

