



# **SPECIFICATIONS**

## **Waterproof Works on roofs**

**United Nations Building N° 2**

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# Introduction

The UNDP Moldova CO, and two United Nations agencies, housed in the UN buildings, are in need of repairs to roofs of buildings 1, 2 and 3 to overcome the various problems of infiltration of rainwater.

It was established that the sum of the defects is the cause of many infiltrations of rainwater into the offices of the top floor of Building 2.

Work will be performed by qualified workers in all technical areas as specified hereunder.

The materials used must be of high quality. The implementation will be in the rules of art.

# Regulatory Background

The entrepreneur must have appreciated the nature and conditions of the premises, site access and consistency of works before responding to the tender specifications.

The contractor will comply with established rules and practices within the occupational structure of the building 1, 2 and 3, in particular any provisions established by the Resident Representative and/or his/her Deputy.

Both the contractor and UN representatives will be attentive to communicate in due time the useful occupation for a better coordination and indicate any identification of problems.

Companies must take into consideration all necessary regulatory compliances of the works, in particular any requirement which may be imposed by the present specifications and by regulations of the UN representatives on site.

The company, referring to their qualifications, should be able to adapt her services to any administrative or technical constraint.

# Quotations

The studies and articles are handled for a fixed price and include the entire work, supply and constraints necessary for a complete and perfect completion, of a perfect performance, excellent finishing and perfect operational quality.

The drawings should be verified and completed by the company which will undertake the achievement of all the works as mentioned in his package price. If the contractor, during the implementation of his quotation, finds an error or omission, it will have the option to change this amount and quantities. The total price obtained by multiplying the quantity and unit price offered will be taken into consideration only for the establishment of that specific part of the entirety of work.

No amount of works or price estimation can be revised during the works in progress.

Only changes to the project duly validated by the contractor and the head of works may lead to a revision of the amounts on which will be applied the unit prices of the market.

Any change of the original market will be a clear agreement in terms of benefits and costs before any action. On the contrary, only the core market will be implemented.

# Subject

## **1. Couvertines parapet**

Replacing zinc couvertines covering the walls in excess of the two gable roof on both sides of the building 2.

## **2. Sealing of skylights.**

Correct the state of the seal around all windows, roof, and any defects in the roof with felt bitumen, in order to avoid the infiltration of rainwater or melting snow, even in case of strong wind.

## **3. Gutters.**

Replacing gutters with new ones, all along both sides of the building 2.

## **4. Ridge tiles and ventilation.**

Replacement of existing ridge tiles with new tiles.

## **5. Placement of around 20 ventilation tiles**

# Brief description of work

**The work includes:**

## **1. Couvertines parapet**

**The works shall be executed in a professional way, taking into account all the necessary security measures applicable to the job.**

*The work involves removing the old plates of zinc, replacing them with new ones, in order to seal the walls in excess of roof and their junction with the roof, with the intention of excluding any possibility leakage caused by rain, powder of melting snow.*

### **Necessary installation of scaffoldings**

- A.** Preparation of the site taking into account the security measures required for these types of roof work.
- B.** Dismantling and evacuation of old installations.
- C.** The walls in excess of the roof and the links with the existing structure must be prepared to receive the new zinc roofing, taking into account the fixing modes used, and retrofits of possible openings. Coverage of the horizontal portion of the wall (crown) should be mounted with a minimum slope of 3.5% and bended to the roof.
- D.** Installation of new roofing sheets of zinc of at least 0,65 mm thick, taking all precautions in relation to sealing and ventilation, at the level of the crown, as well as of the descendant walls and recovery of the roof (connections with the existing structure). Cover the two vertical extremities of the wall with borders of more or less 30 cm and folding against water flow.

**Photos : 1, 2 and 3**

## **In general**

All work and materials required for the perfect completion, whether or not mentioned in the description are of the responsibility of the successful bidder, they should be included in the overall financial offer.

All works necessary for the full completion, as well as the manufacture, assembly, transportation at work, lifting equipment (scaffoldings, winches, cradles), handling, the proper storage on site, as well as the temporary protection needed for the execution of the works will be taken into consideration and shall be at the burden of the company.

The company will be responsible, if needed, for all necessary approvals from competent authorities for any installation of scaffoldings, winches, cradles, trucks and so on.



## **2.Sealing of skylight windows.**

**The work must be performed in a professional way, taking into account all the necessary security measures to roof work.**

*The works involve insulating the infiltration of rainwater, melting snow or slush powder, all around the roof windows, as well as verification of the tightness of the roofing (roofing bitumen sheets).*

- A.** Preparation of the site taking into account all the necessary security measures for this type of roof work.
- B.** Remove tiles around the skylights. Check the tightness of the roofing (roofing bitumen sheets), and make the necessary corrections to its tightness if necessary.
- C.** Correct any defects or deformities of waterproofing kits all around the existing skylights.
- D.** Replace rotting foam gaskets of the sealing kits by putting new joints on which the tiles will be placed.
- E.** Replacement of the tiles around the roof windows in place, if needed.
- F.** Check for proper sealing of openable roof windows.

Photos : **4, 5 and 6**

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The company will be responsible, if needed, for all necessary approvals from competent authorities for any installation of scaffoldings, winches, cradles, trucks and so on.

## **2.Gutters**

**The work must be performed in a professional way, taking into account all the necessary precautions for working on roofs.**

*The work involves removing the old defective gutters and their attachments and to replace them with new gutters of sufficient size.*

*The gutters should be fitted with a skirt, attached under the sub-roof (flexible bitumen) and end up in the gutter.*

- A.** Preparation of the site taking into account the security measures required for this type of work on the roof.
- B.** Dismantling of old gutters and their attachments.
- C.** Sanding and painting of the borders of fascias.
- D.** Fixing clips, skirts and gutters. The gutters should be of more or less 165 mm and must be welded together, as well as at the level of connection pools. There should be a slope of 4 to 6 mm per meter. Attachment clips must be placed at intervals of 40-50 cm maximum. There should be expansion joints every 10 m /L minimum.
- E.** Verification of proper water flowing in the gutters.

Photos : **13, 14 and 15**

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The company will be responsible, if needed, for all necessary approvals from competent authorities for any installation of scaffoldings, winches, cradles, trucks and so on.

#### **4. Ridge tiles in painted metal**

**The work must be carried out in a professional way, taking into account all the security measures necessary to work on roofs.**

*The works involve removing of all the ridge tiles and replace them with new ones in metal with flexible joints, preventing from upcoming rainwater, powder snow or melting snow even in case of strong winds.*

- A.**Preparation of the site taking into account the security measures required for this type of roof work.
- B.** Dismantling of old ridge tiles and plaster of cement and evacuation from the site.
- C.**Replace, if necessary all damaged tiles in the first row on both sides of the roof.
- D.**Check the wooden structure under the tiles and, where appropriate, carry out repairs.
- E.**The new ridge tiles should be in metal and of the same color as the existing tiles. Special attention should also be paid to the size of these metal tiles in order to correctly cover the two sides of the roof. They must be equipped with flexible joints which will be completely in accordance with the tiles of the roof, in order to prevent from upcoming water from whatever source and in case of strong winds.

Photos: **10, 11 and 12**

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The company will be responsible, if needed, for all necessary approvals from competent authorities for any installation of scaffoldings, winches, cradles, trucks and so on.

## **6. Ventilation tiles**

At least 10 tiles should be placed on each side of the roof at regular intervals and on the upper and lower roof.

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The company will be responsible, if needed, for all necessary approvals from competent authorities for any installation of scaffoldings, winches, cradles, trucks and so on.