
Table of content

1. EMERGENCY ARCHITECTURE

1.1. History of emergency architecture:

- 1.1.1. What is the objective of emergency architecture?
- 1.1.2. When did we become aware of the necessity of emergency architecture?
- 1.1.3. How did emergency architecture develop throughout the years?
- 1.1.4. In what state is emergency architecture nowadays?
- 1.1.5. What is required from us for the future of emergency architecture?
- 1.1.6. What are the guidelines for the design of a shelter?
- 1.1.7. Project guidelines

1.2. History of emergency architecture in Lebanon:

- 1.2.1. Why Lebanon?
- 1.2.2. Past: Palestinians
 - 1.2.2.1. Immigration waves
 - 1.2.2.2. UNRWA
 - 1.2.2.3. Refugee Camps
 - 1.2.2.4. Guidelines for the project
- 1.2.3. Present: Syrians
 - 1.2.3.1. Lebanese-Syrian history
 - 1.2.3.2. Settlements
 - 1.2.3.2.1. Current situation
 - 1.2.3.2.2. Formal settlements
 - 1.2.3.2.3. Informal settlements
 - 1.2.3.2.4. UNHCR
 - 1.2.3.3. Guidelines for the project

2. SOCIOLOGICAL RESEARCH:

2.1. Preparation work

- 2.1.1. Objectives
- 2.1.2. Methodology
- 2.1.3. Subject pool selection
- 2.1.4. International guidelines for interviews
- 2.1.5. UNHCR recommendations for interviews
- 2.1.6. Questionnaires

2.2. Site visits and interviews

- 2.2.1. Interviews with the refugees
- 2.2.2. Interviews with staff members

2.3. Detailed results (for each question put the charts)

- 2.3.1. Observations
- 2.3.2. Interviews results:
 - 2.3.2.1. Refugees
 - 2.3.2.2. Staff

-
- 2.3.3. Focus group
 - 2.4. Refugees in Europe**
 - 2.5. Guidelines for the project**

3. TECHNOLOGIES STUDIED:

3.1. Gridshell

- 3.1.1. Description of technology
- 3.1.2. Case study
- 3.1.3. Reasons for exclusion

3.2. Space frame MERO

- 3.2.1. Description of technology
- 3.2.2. Case study
- 3.2.3. Conclusions

3.3. Tensile structures

- 3.3.1. History
- 3.3.2. Qualities of the membrane arc
- 3.3.3. Types
 - 3.3.3.1. Anticlastic
 - 3.3.3.2. Synclastic
- 3.3.4. Location: application and classification
- 3.3.5. Membrane support
- 3.3.6. Design and form finding
- 3.3.7. Fabrication process
- 3.3.8. Cleaning and maintenance
- 3.3.9. Conclusions

4. MATERIALS STUDIED:

4.1. Process description leading to chosen material

4.2. UNHCR projects

- 4.2.1. Description of different used materials
- 4.2.2. Guidelines for the project

4.3. Detailed study on chosen structural material

- 4.3.1. Timber in the construction field
- 4.3.2. Plastic in the construction field
- 4.3.3. Cement footing foundation
 - 4.3.3.1. Deck pier block
 - 4.3.3.2. Cement anchors

4.4. Conclusions

5. THE PROJECT:

5.1. Concept

5.2. Design

5.3. Method of statement

5.4. Constructive details

- 5.4.1. Structure

-
- 5.4.1.1. Space frame construction
 - 5.4.1.2. Joints
 - 5.4.1.3. Floor structure
 - 5.4.2. Roof Edge
 - 5.4.3. Tarpaulin
 - 5.4.4. Partitions
 - 5.4.4.1. Internal partitions
 - 5.4.4.2. External partitions
 - 5.4.5. Water containers
 - 5.4.6. Cooling
 - 5.4.7. Heating
 - 5.5. Plans**
 - 5.6. Elevations**
 - 5.7. Sections**
 - 5.8. Details**
 - 5.9. Perspectives and render**
 - 5.10. Bill of quantities**
 - 5.11. Structural study**

Attachments

- A1. QUESTIONS FOR REFUGEES
- A2. QUESTIONS FOR STAFF
- A3. DETAILED STRUCTURAL REPORT

Bibliography

Sitography