





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

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Made by: Department of architecture

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Code: GE-001

Sheet list

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GE-310.....Urban Proposal Explanation

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Deliverable #7
Project Drawings

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architecture

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Europe

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GE-102 Code:

Costa Rica is a small country located en Central America. San José, its capital, is the heart of the nation and concentrate the social, economic, religios and cultural activities.

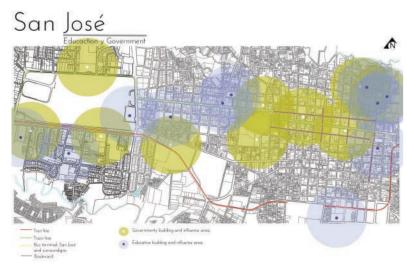
In the past decades, population the live in this city started to migrate to the suburbs, letting it completly abandoned at night.

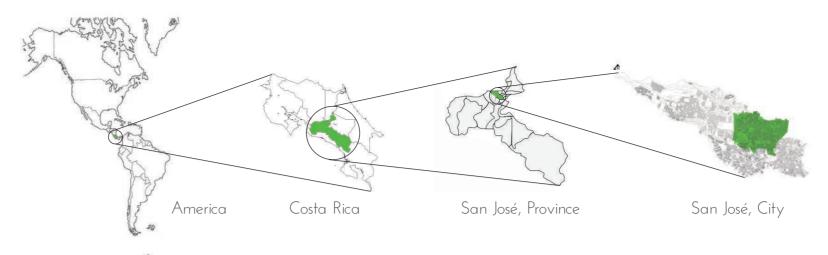
San José have potential to be a great capital, but needs people who take care of it, and no one love more a place then when they live in it.

That is why Tec-Team is developing an urban i ntervention for San José starting with a housing proposal.

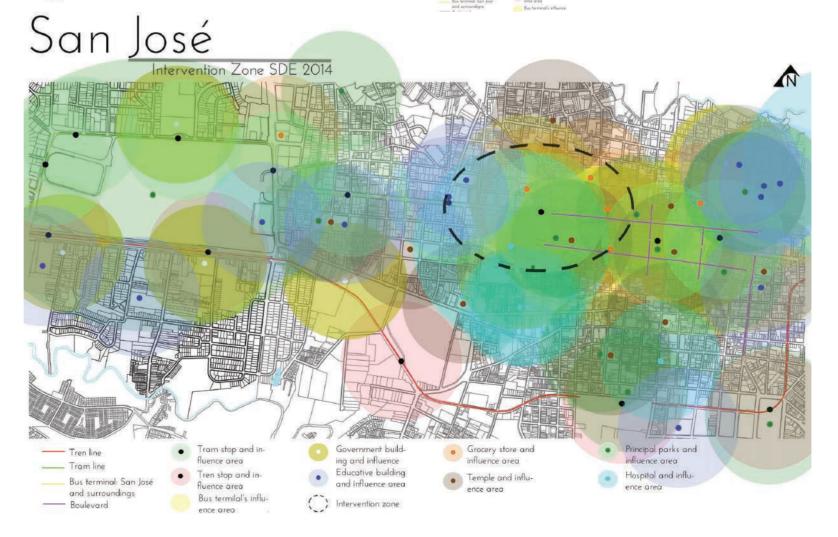
To determinate the right location, we made an analysis of the ubication of the different services that our city offers and selected La Merced district as the intervention zone for the Solar Decathlon Europe 2014.















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Urban Project Location

Content: -Global localization -Urban analysis

Scale: None

Date: 11/3/2014

Code: GE-301

Trópika is a housing project located in San José, the capital city of Costa Rica.

Trópika is also part of a master plan that looks for the revitalization of a fotgotten part of the city that has all the components to be an important social center.

Our proposal is design for the senior citicenz, reason why the urban intervention not only pretend to reactivate the zone, but also adjust urban conditions to users needs.

One of the principles of our project is to integrate ourselfs with the context and bring new solutions of trade, recration and housing places. To fulfill that goal, our project shows an openning that conects people with the urban activity and promote social harmony.

Trópika seeks to creat a "barrio" (neighber hood), where tenants and the city mix to creat a companionship and take care of eachother.

Trópika is a living module that present the flexibility of be constructed in an independent way, such as a house, or it can gather with other modules in order to make a vertical housing option

The housing complex that Tec Team is work ing for the Solar Decathlon Europe 2014, consist in mini-towers of medium height that propitiate social sharing by the generation of public and common spaces in Pasaje Jiménez, a place that once was an important trade center but that is totally abandoned.

This mini-tower have been designed as an option to bring density to the capital an show to the developers that we can use our architectural tradition to create modern and sustainable buildings that go hand to hand with technology.







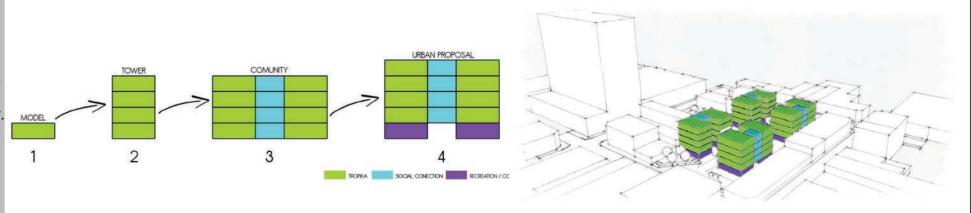
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Project Drawings

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Urban Proposal Explanation

Content: -Action plan

-Urban connectivity

-Building diagrams

Scale: None

Date: 11/3/2014

Code: **GE-310**







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Urban Proposal Explanation

Content: -Complex floor plants -Urban sections

Scale: None

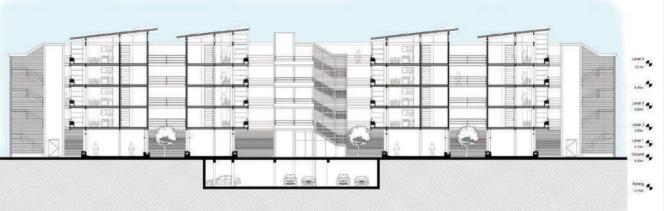
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Date: 11/3/2014









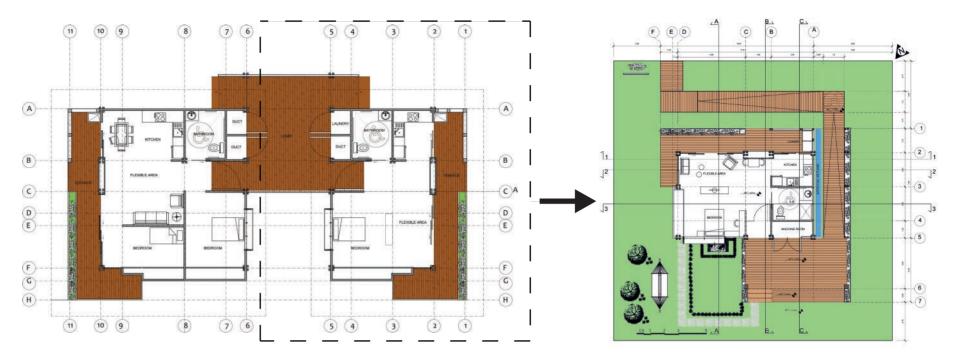
Urban Section B-B No scale

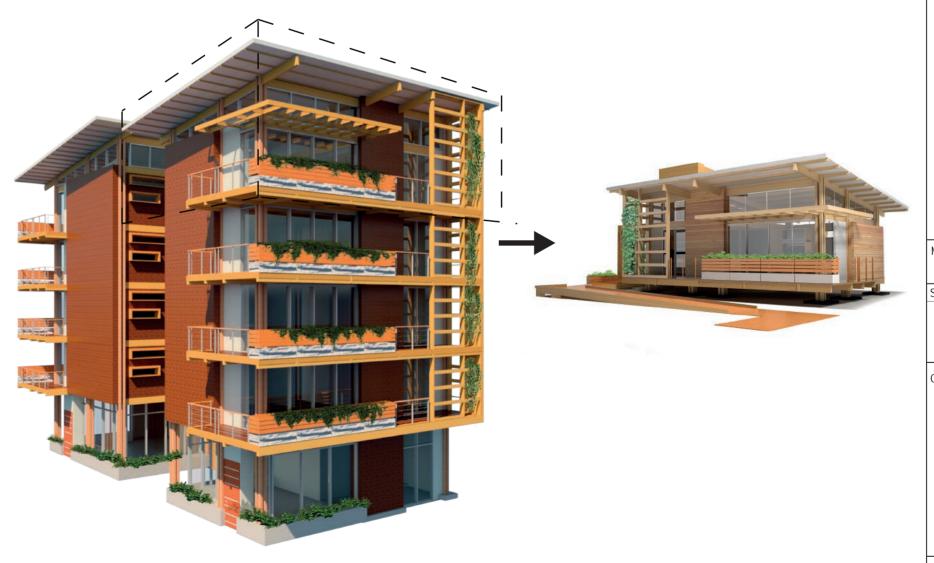
Urban Section A-A No scale

Trópika is a versatile module that can be constructed individually as a house, or gruped to make towers.

For the competition in Versailles, Tec-Team took the 55.5 m² apartment and a lobby located at the last floor of the mini-tower to creat the living prototype.

In adition, we designed a green tunnel as the main entrance of the module to simulate that tropical envioroment that we have in our country.









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Competition Dwelling

Content: -Floor plans -Exterior renderings

Scale: None

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Code: GF-





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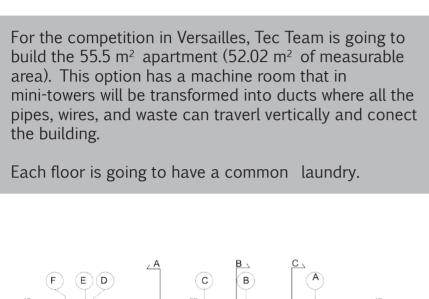
Competition Dwelling

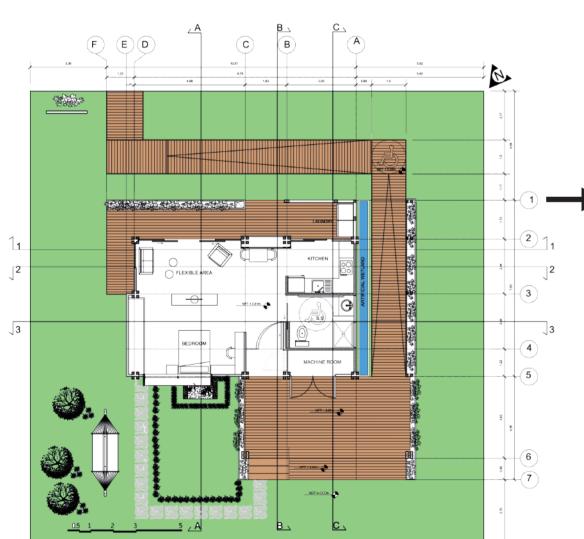
Content: -Floor plan -Duct diagram

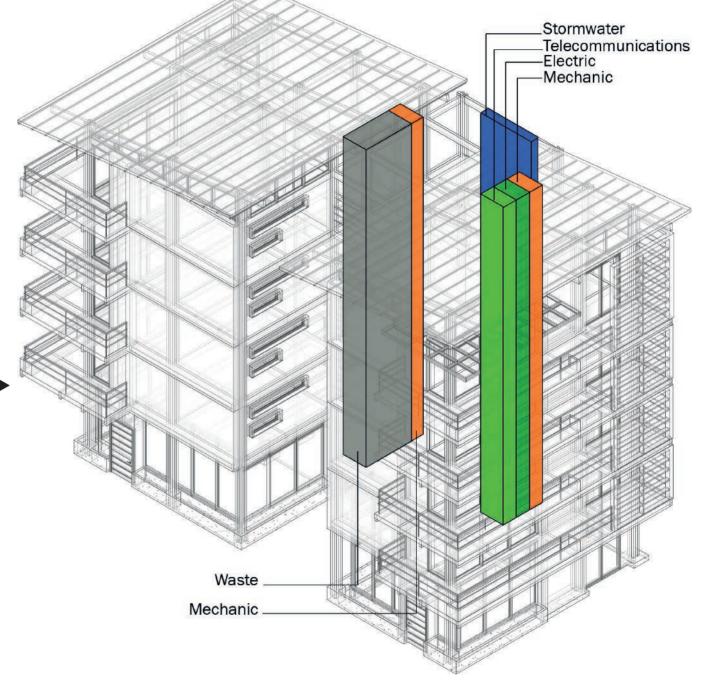
Scale: None

Date: 11/3/2014

Code: **GE-331**







* Last minute change because of the constructive matters.







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Exterior Renderings

Content: -Vew from 1st Avenue

Scale: None

Date: 11/3/2014

Code:







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Exterior Renderings

Content: -Vew from the Encouter Plaza

Scale: None

Date: 11/3/2014

Code:







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Exterior Renderings

Content: -Vew from a Trópika's balcony

Scale: None

Date: 11/3/2014

Code:













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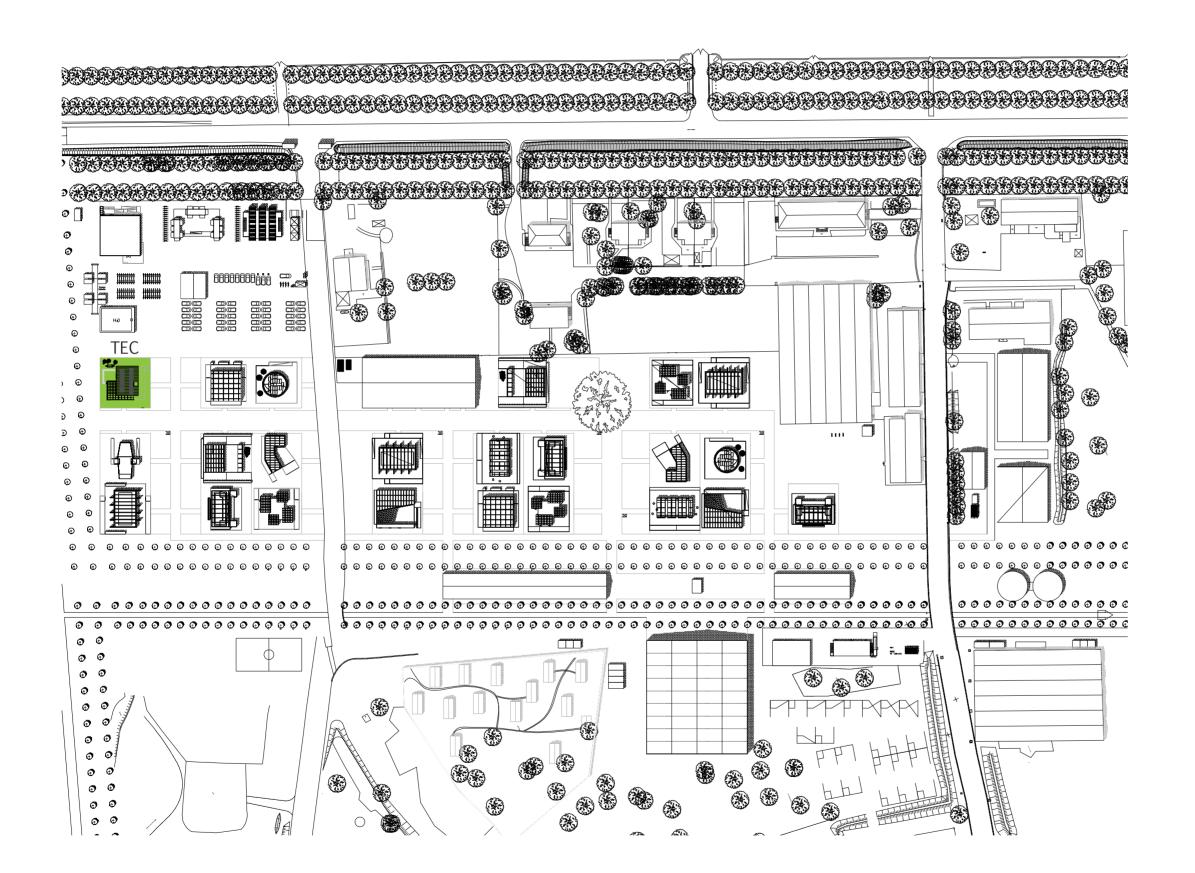
Exterior Renderings

Content: -Exterior renderings of the living prototype

Scale: None

Date: 11/3/2014

Code:







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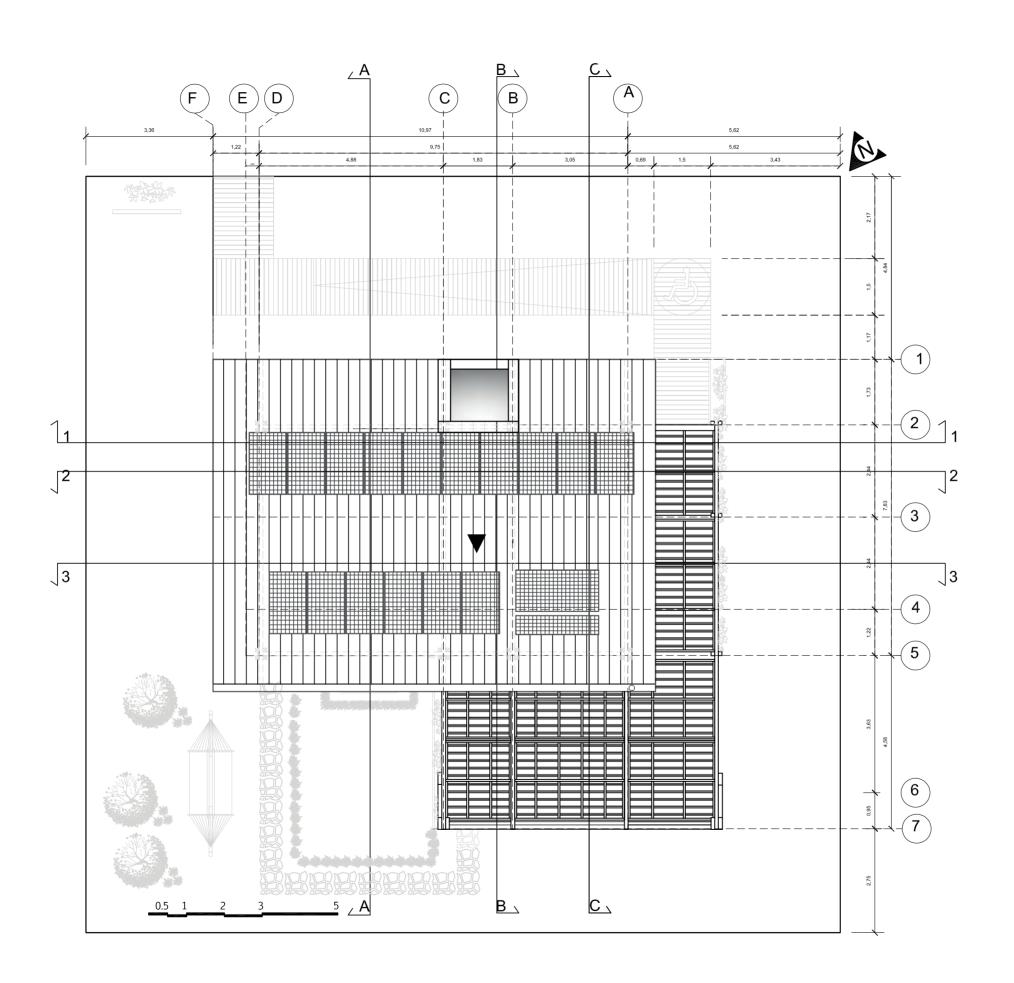
Sheet title

La Cité du Soleil Plan

Content: -La Cité du Soleil Plan

Scale: 1:1500 Date: 11/3/2014

AR-001 Code:







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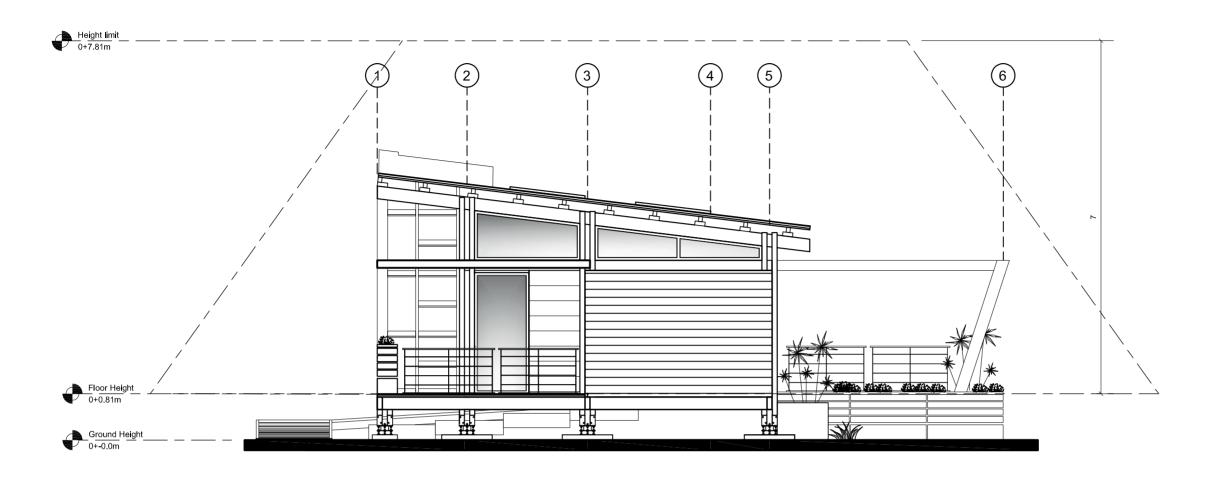
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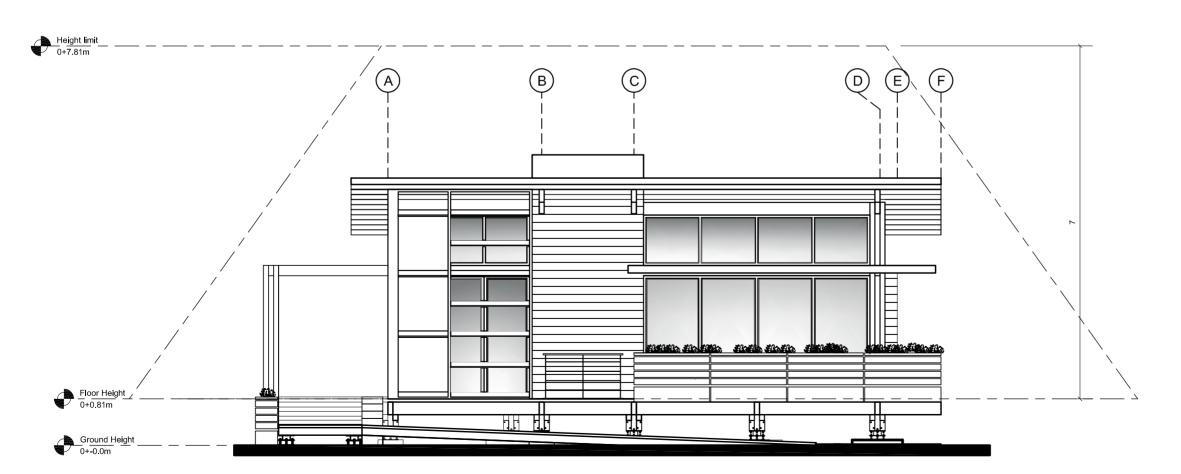
Site plan

Content: -Site plan

Scale: 1:100

Date: 11/3/2014











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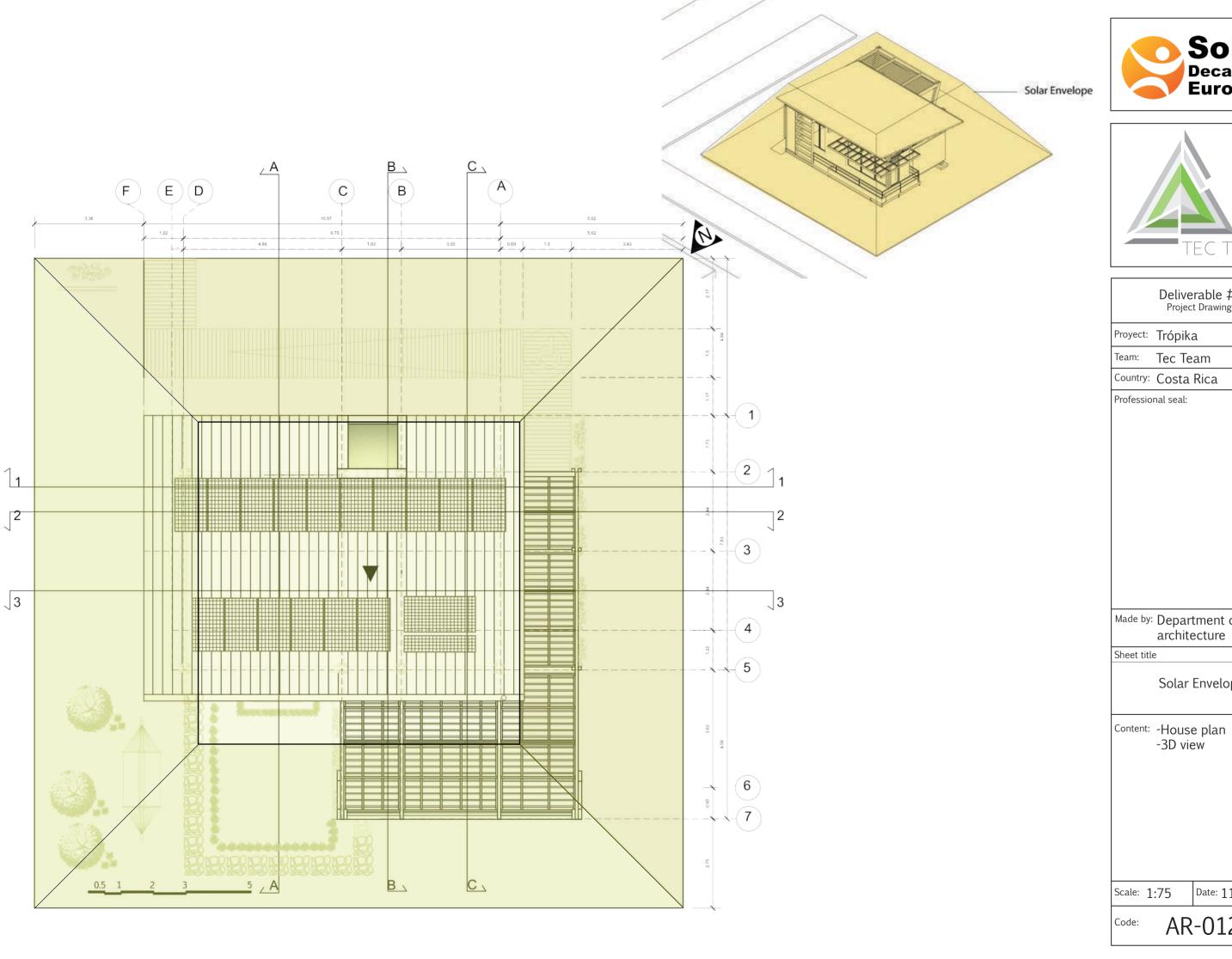
Sheet title

Solar Envelope

Content: -Site elevations

Scale: 1:75

Date: 11/3/2014







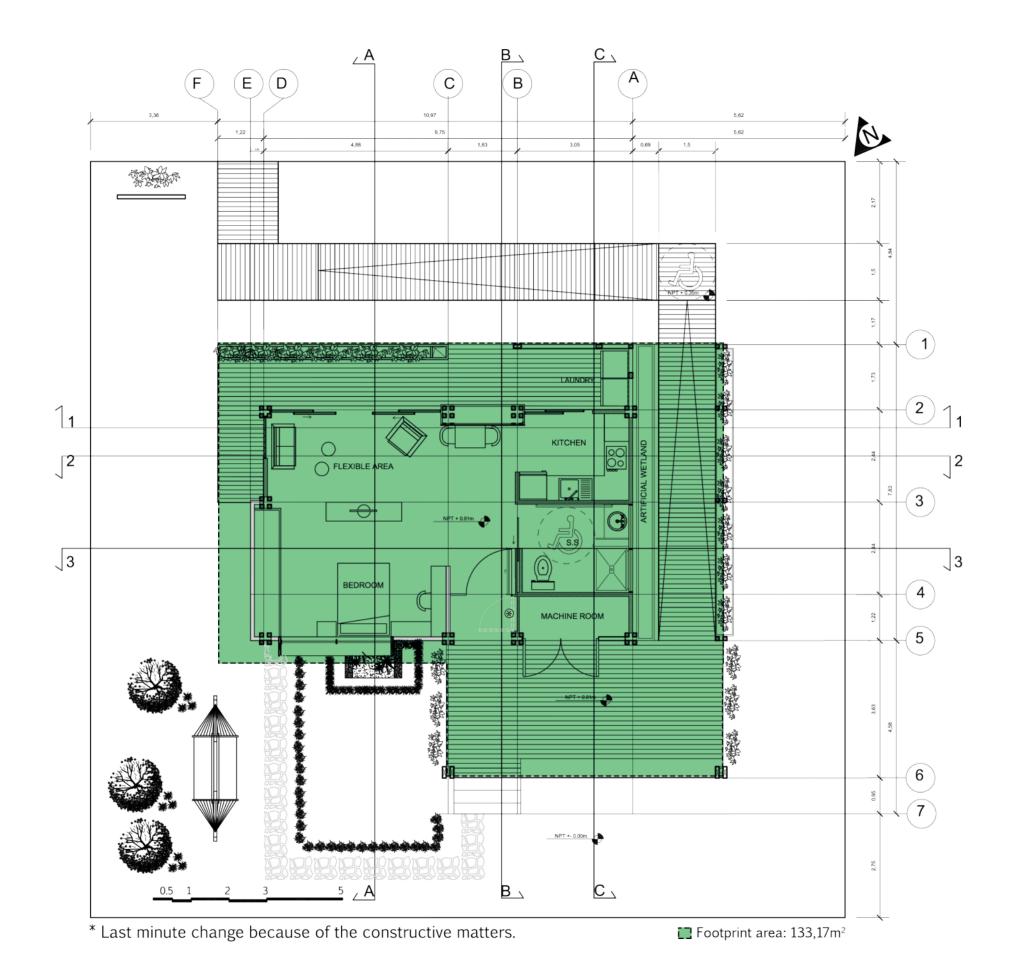
Tec Team

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Solar Envelope

Date: 11/7/2014

AR-012







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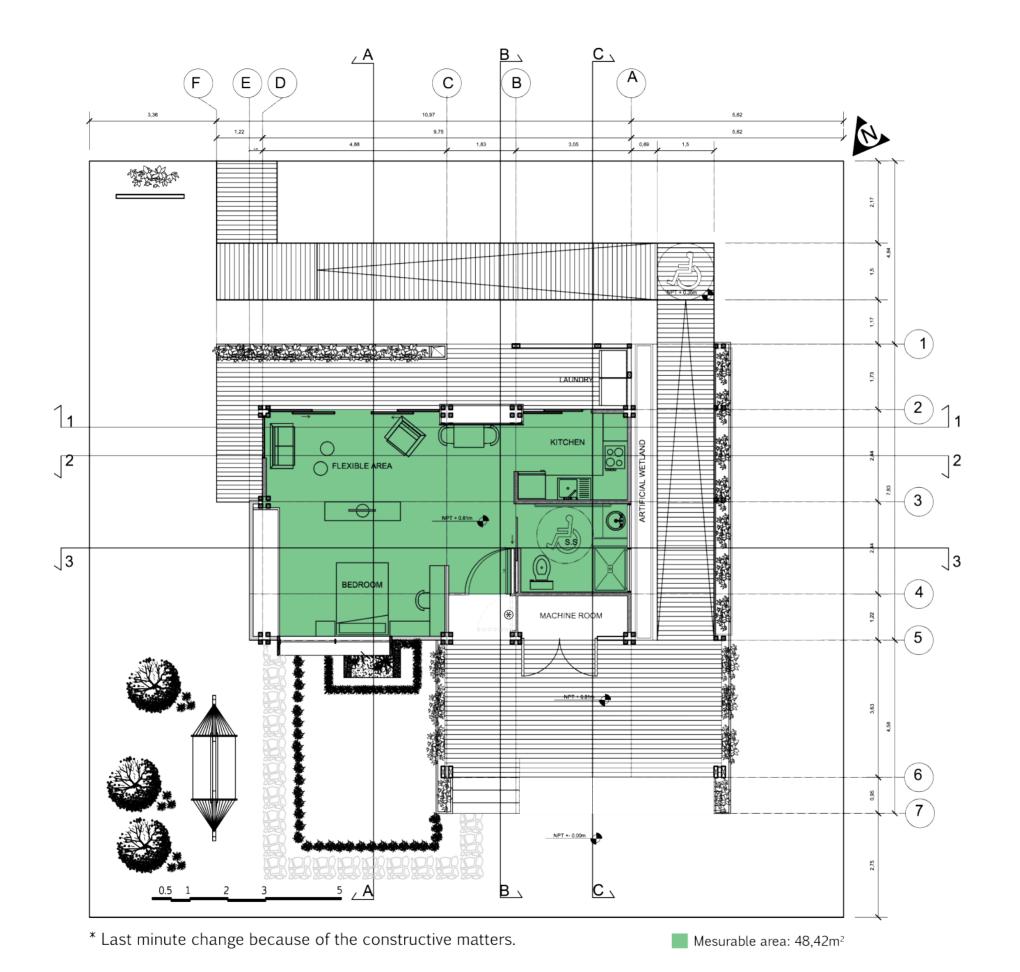
Sheet title

Architectural Footprint

Content: -House plan

Scale: 1:100

Date: 11/3/2014







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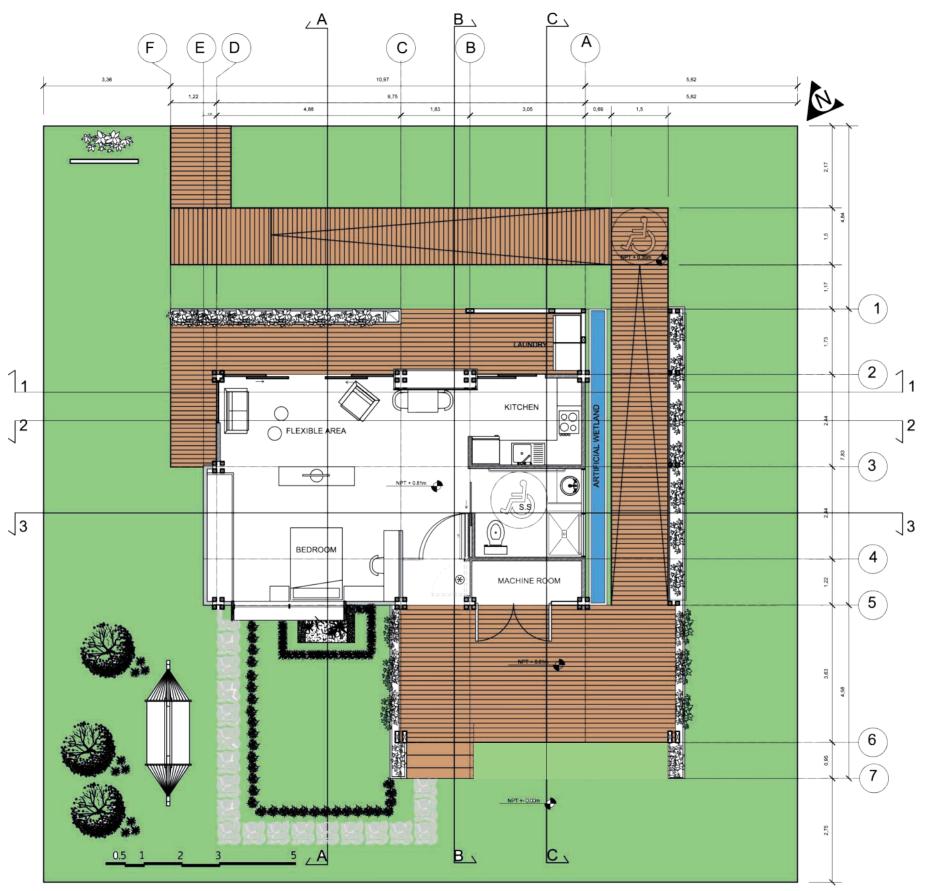
Sheet title

Measurable Area

Content: -House plan

Scale: 1:100

Date: 11/3/2014



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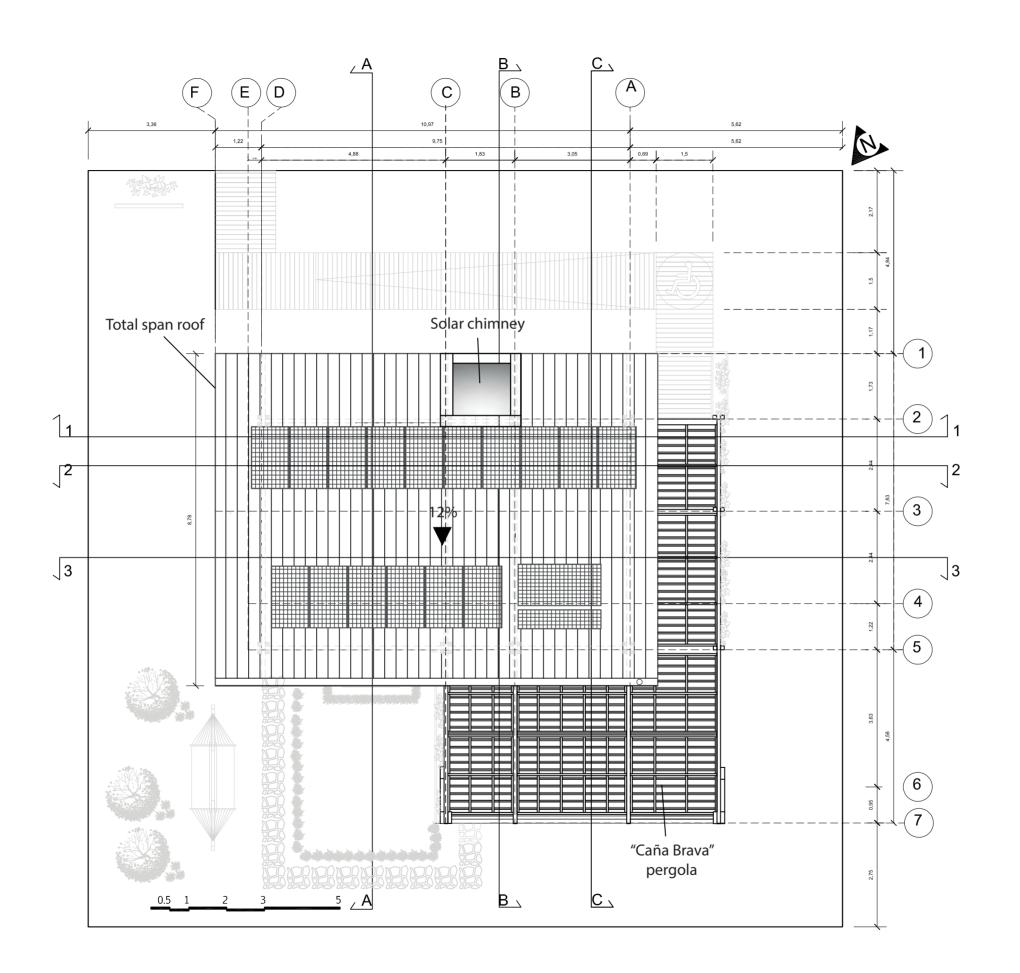
Sheet title

Floor Plan

Content: -House plan

Scale: 1:100

Date: 11/3/2014







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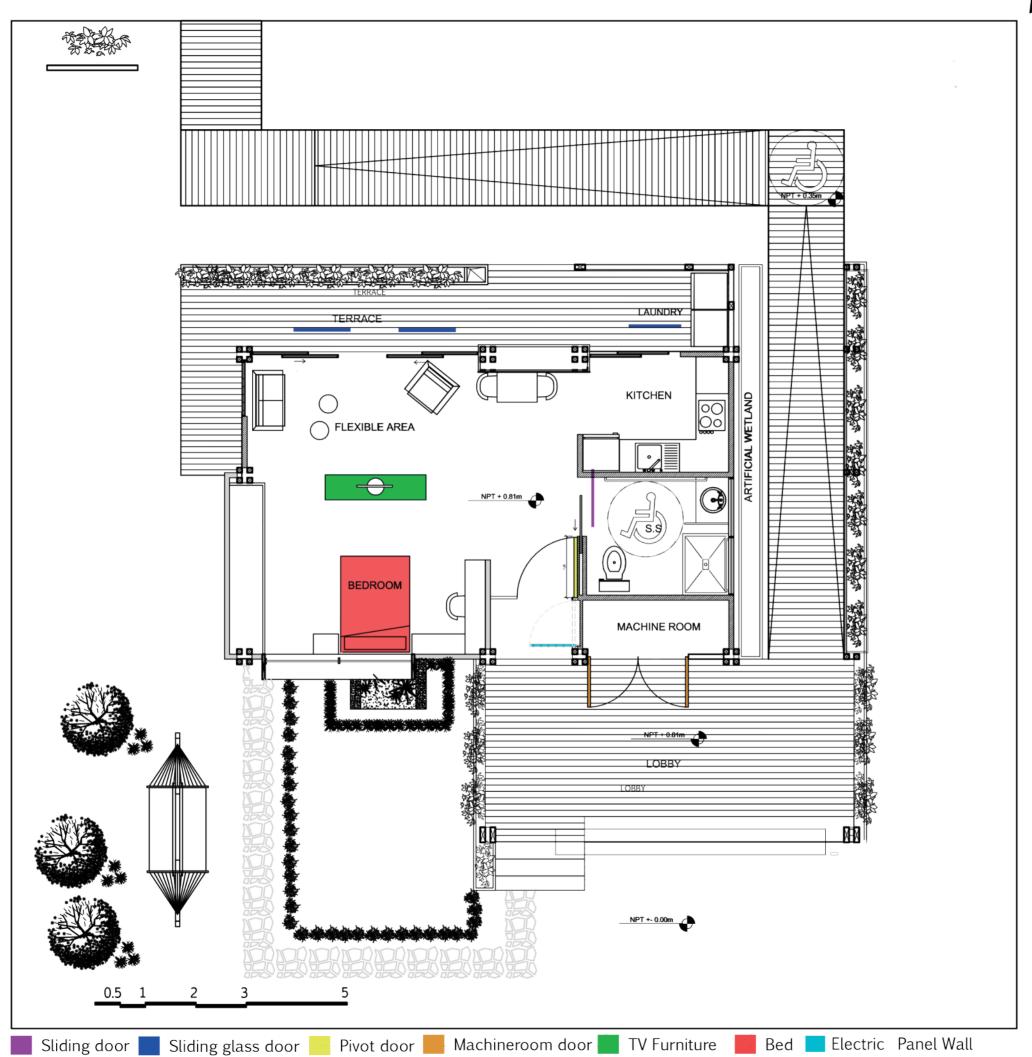
Roof Plan

Content: -Roof plan

Scale: 1:100

Date: 11/3/2014









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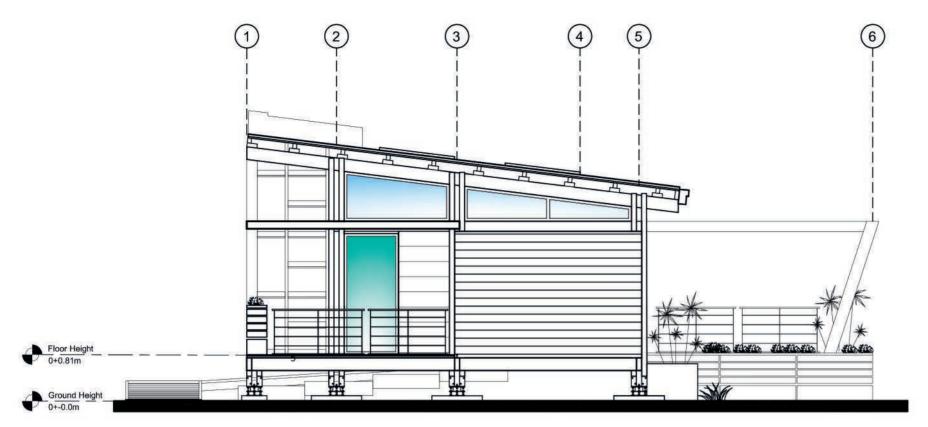
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Reconfigurable features

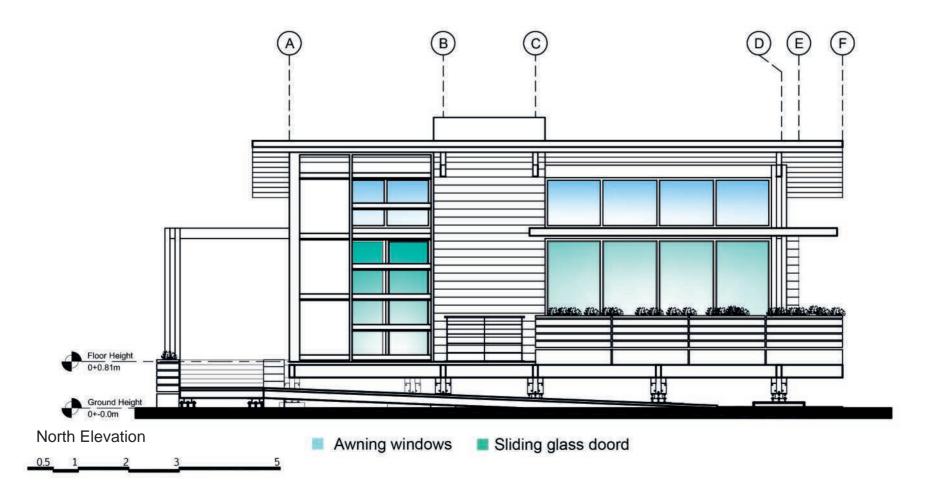
Content: -House plan

Scale: 1:75

Date: 11/3/2014



West Elevation







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Sheet title

Reconfigurable features

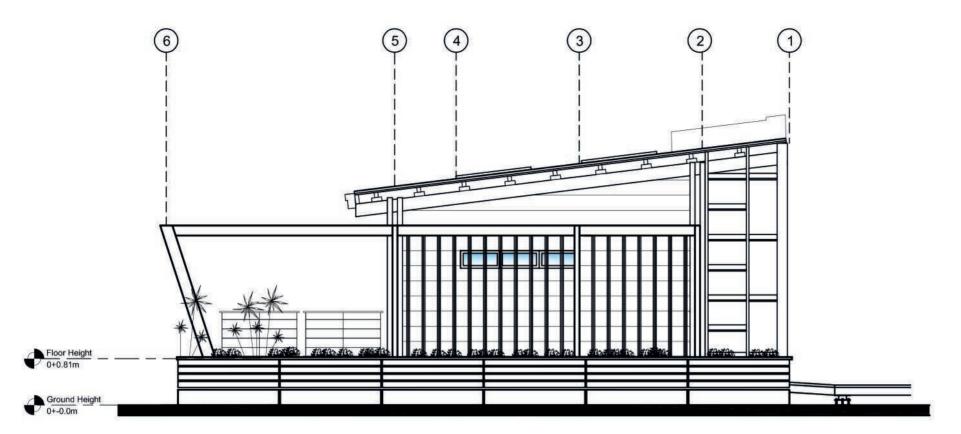
Content: -West elevation -North elevation

Scale: 1:75

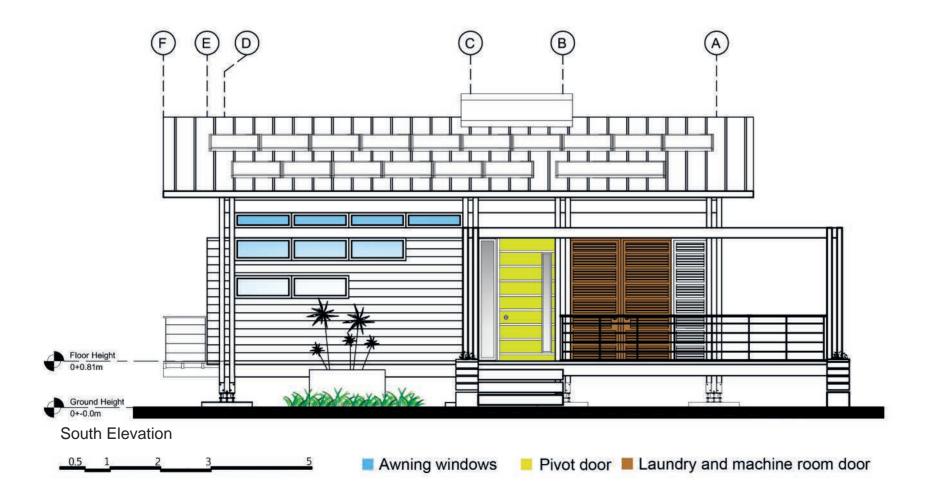
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AR-042



East Elevation







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Sheet title

Reconfigurable features

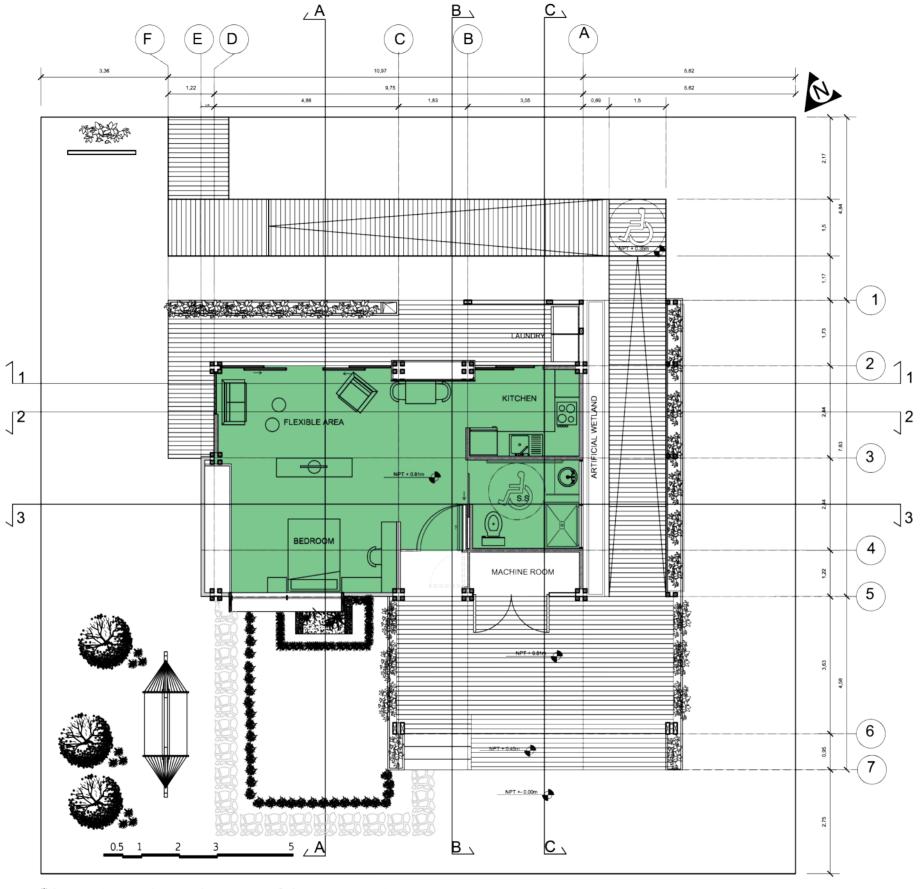
Content: -East elevation -South elevation

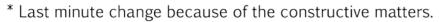
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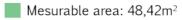
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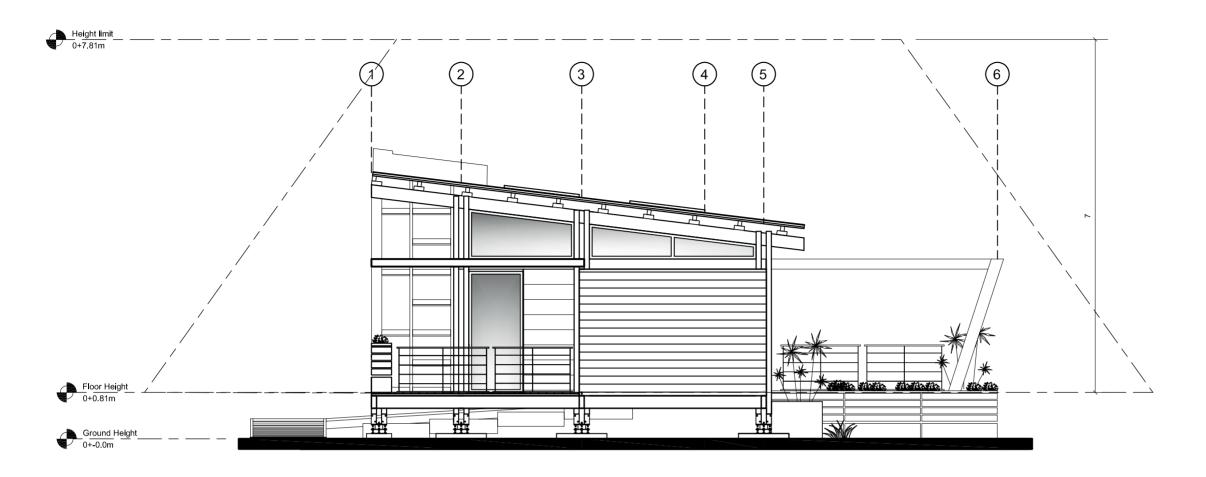
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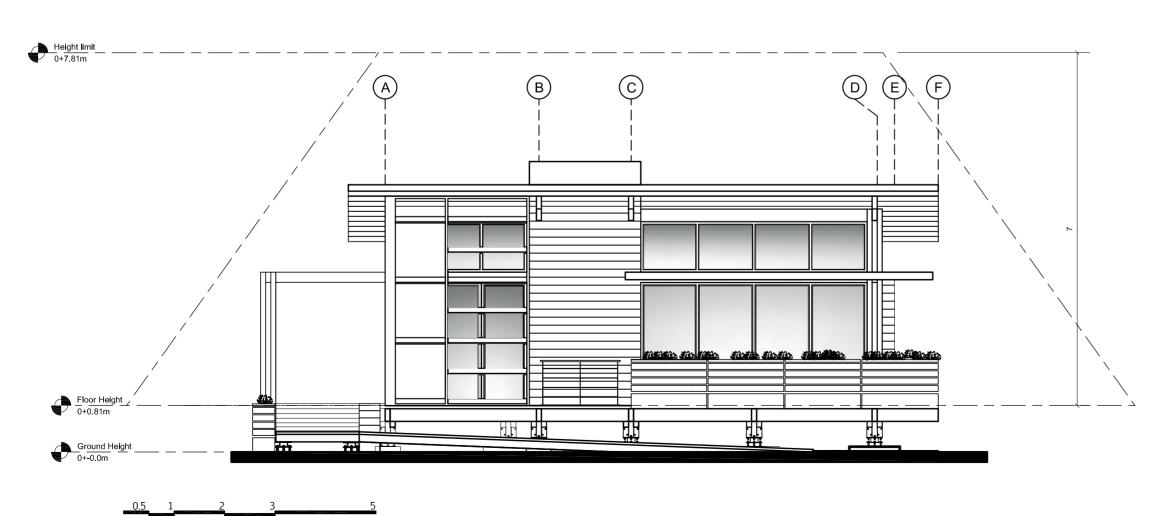
Measurable Area

Content: -House plan

Scale: 1:100

Date: 11/3/2014









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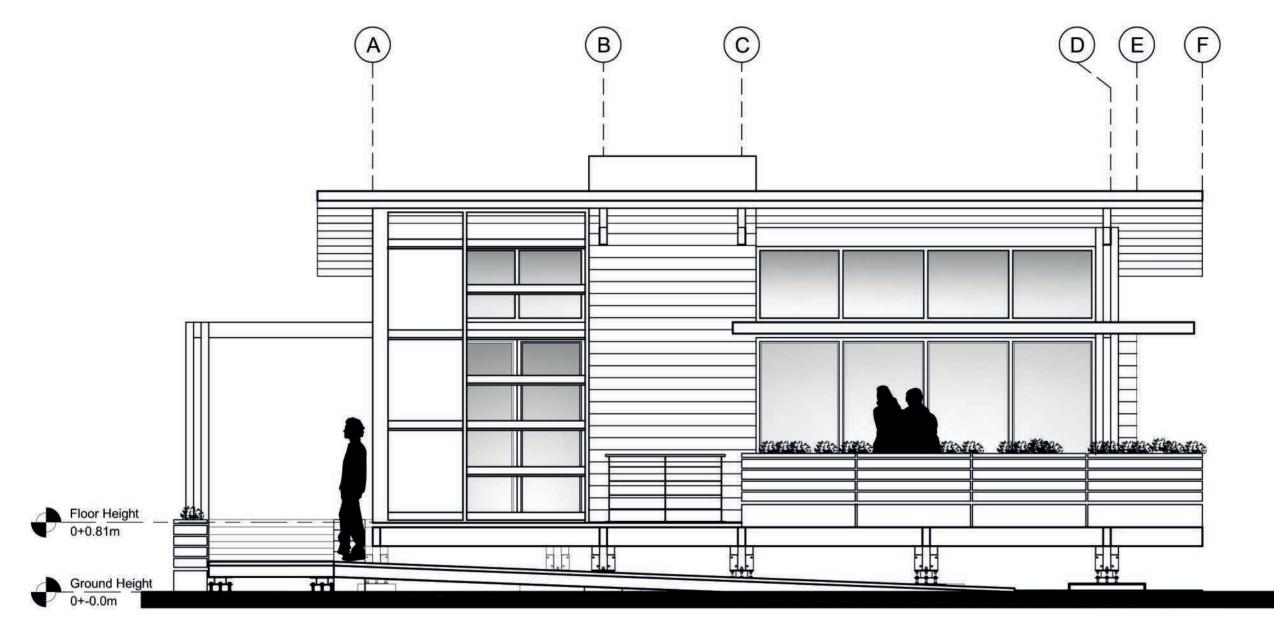
Sheet title

Solar Envelope

Content: -Site elevations

Scale: 1:75

Date: 11/3/2014











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Building Elevations

Content: -North Elevation

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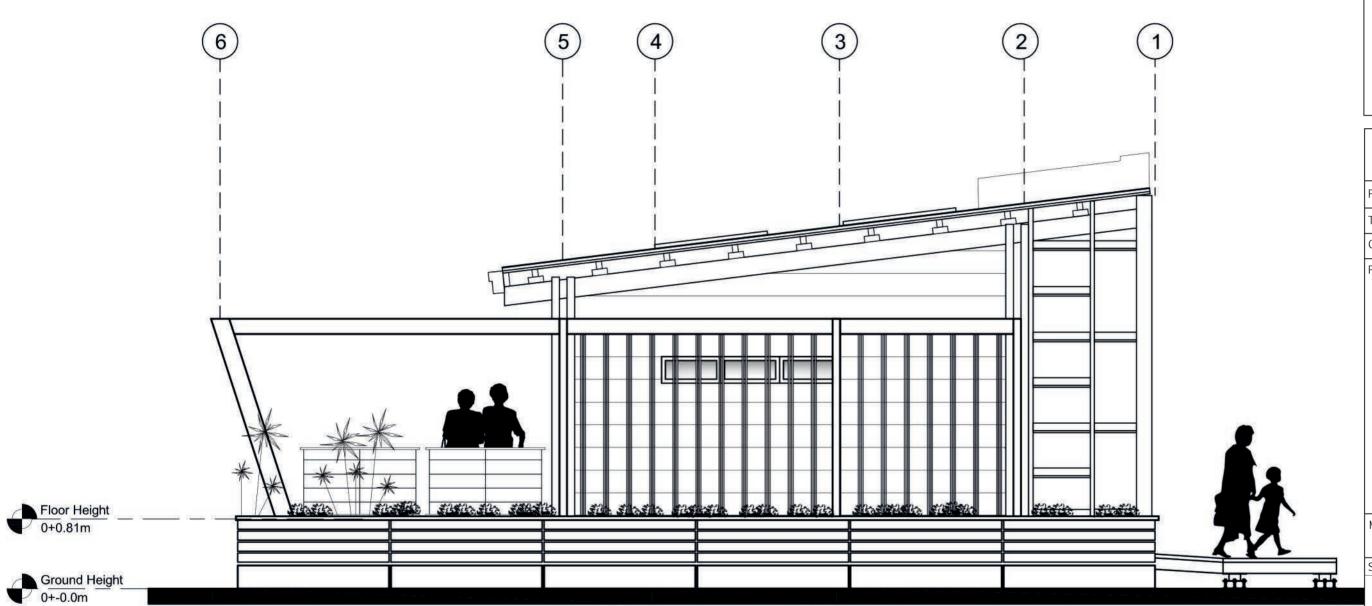
Building Elevations

Content: -East Elevation

Scale: 1:50

Date: 11/3/2014

Code: AR-112



East Elevation







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Sheet title

Building Elevations

Content: -South Elevation

Scale: 1:50

Date: 11/3/2014







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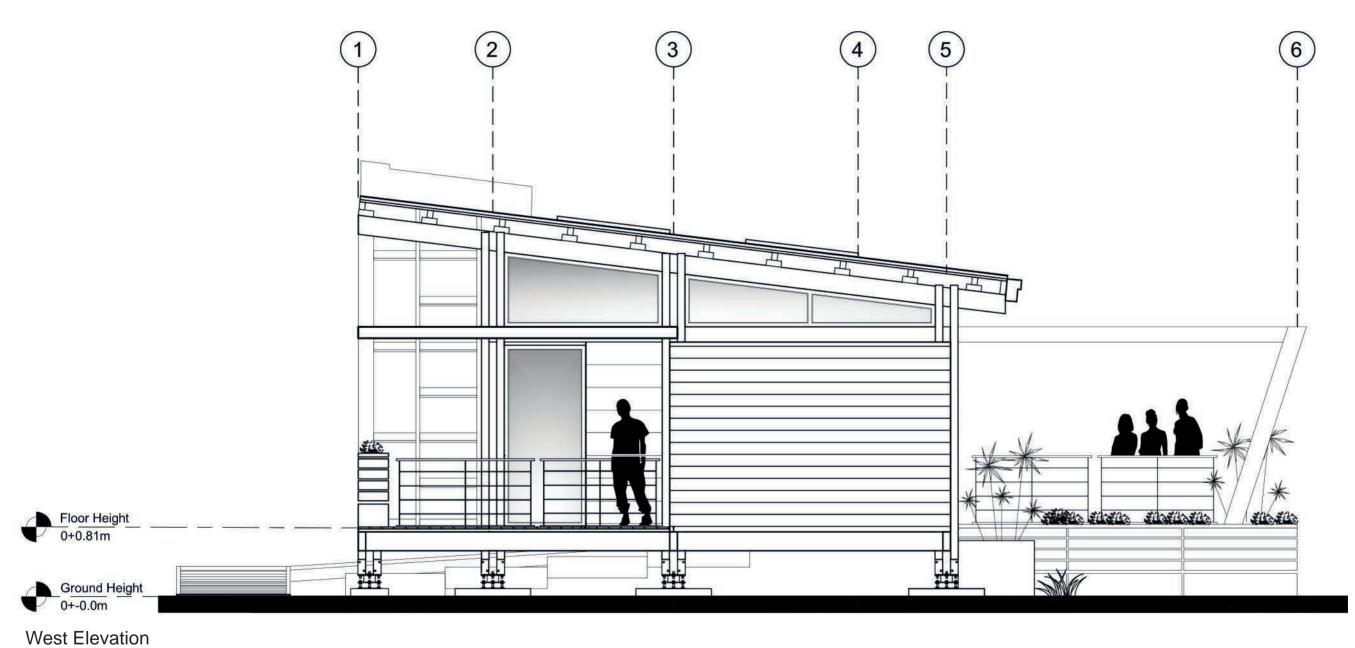
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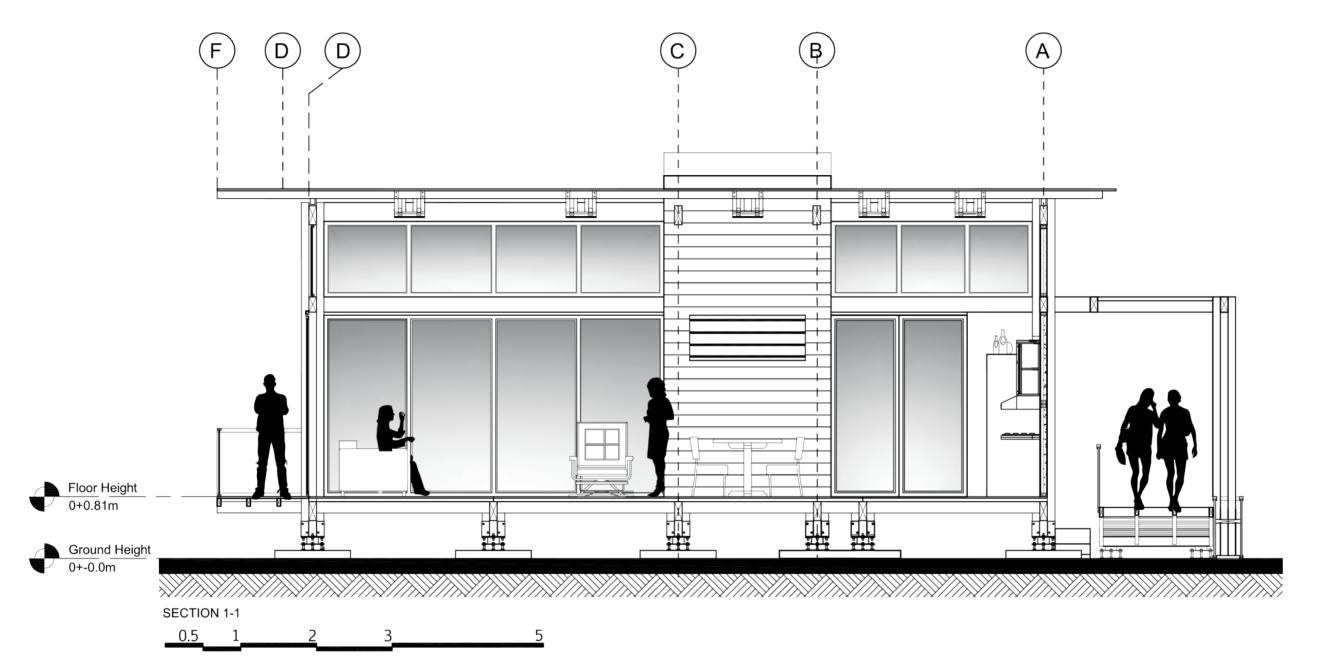
Building Elevations

Content: -West Elevation

Scale: 1:50

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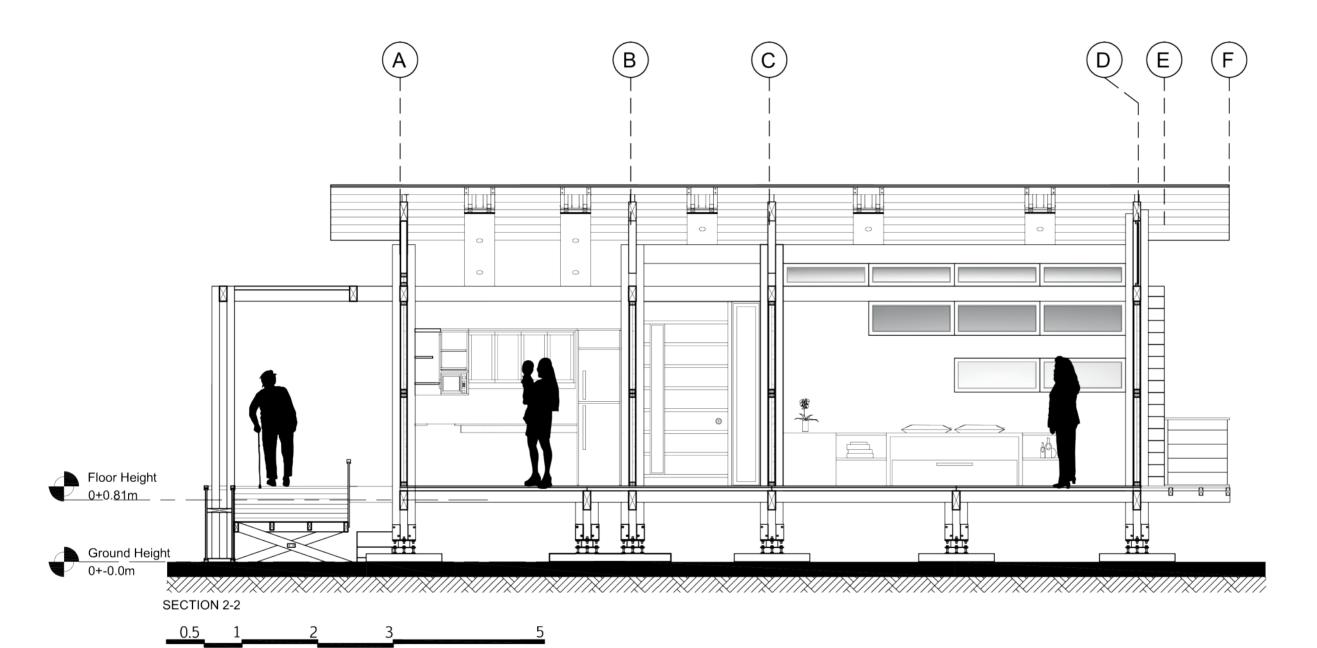
Sheet title

Longitudinal section

Content: -Section 1-1

Scale: 1:50

Date: 11/3/2014







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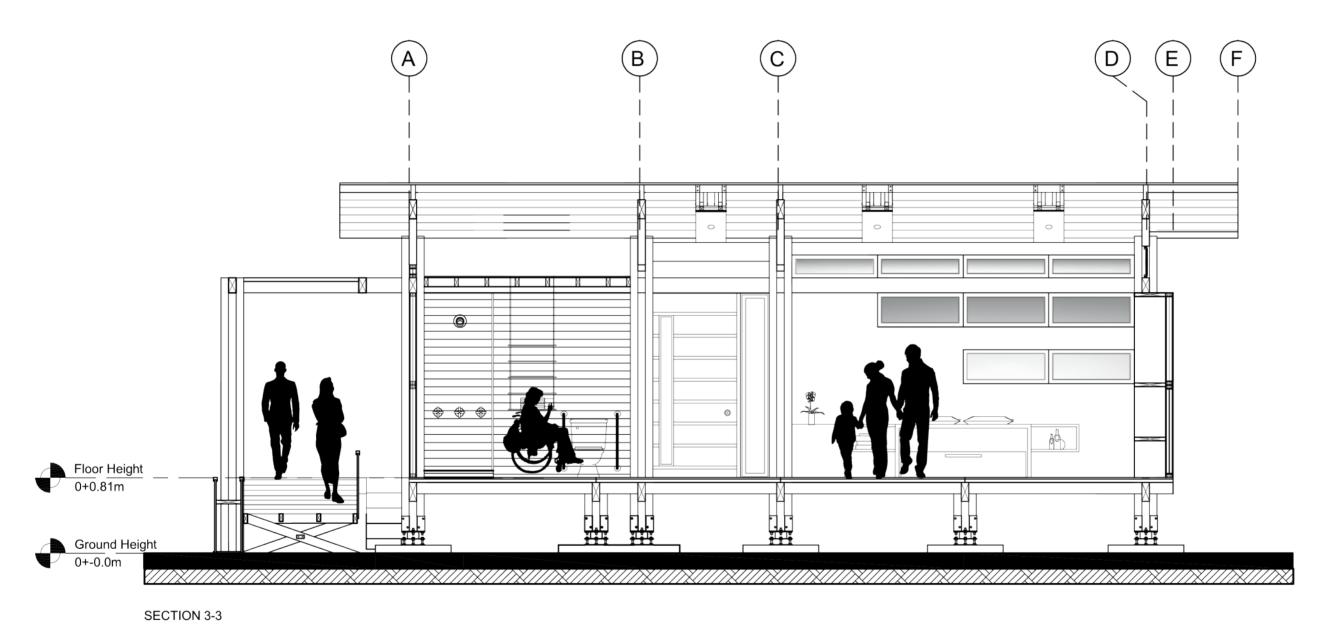
Sheet title

Longitudinal section

Content: -Section 2-2

Scale: 1:50

Date: 11/3/2014







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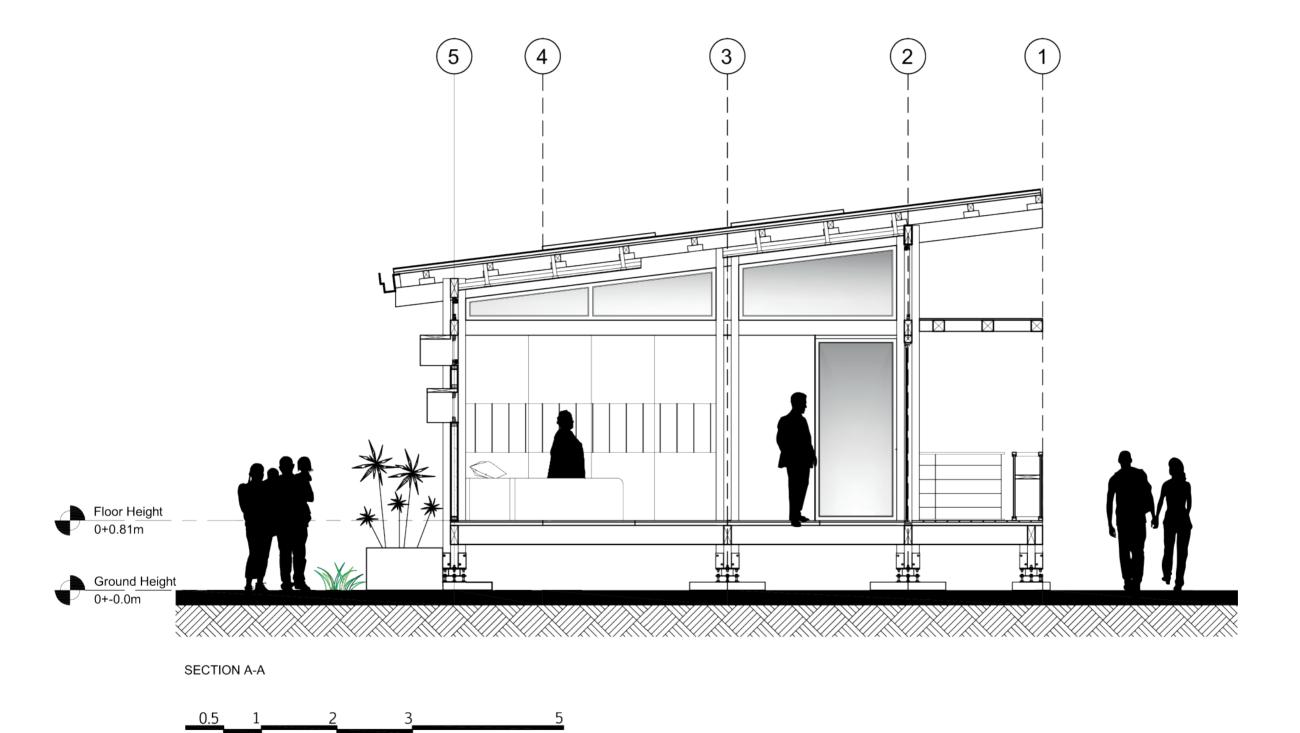
Sheet title

Longitudinal section

Content: -Section 3-3

Scale: 1:50

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Sheet title

Transversal section

Content: -Section A-A

Scale: 1:50

Date: 11/3/2014





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of architecture

Sheet title

Transversal section

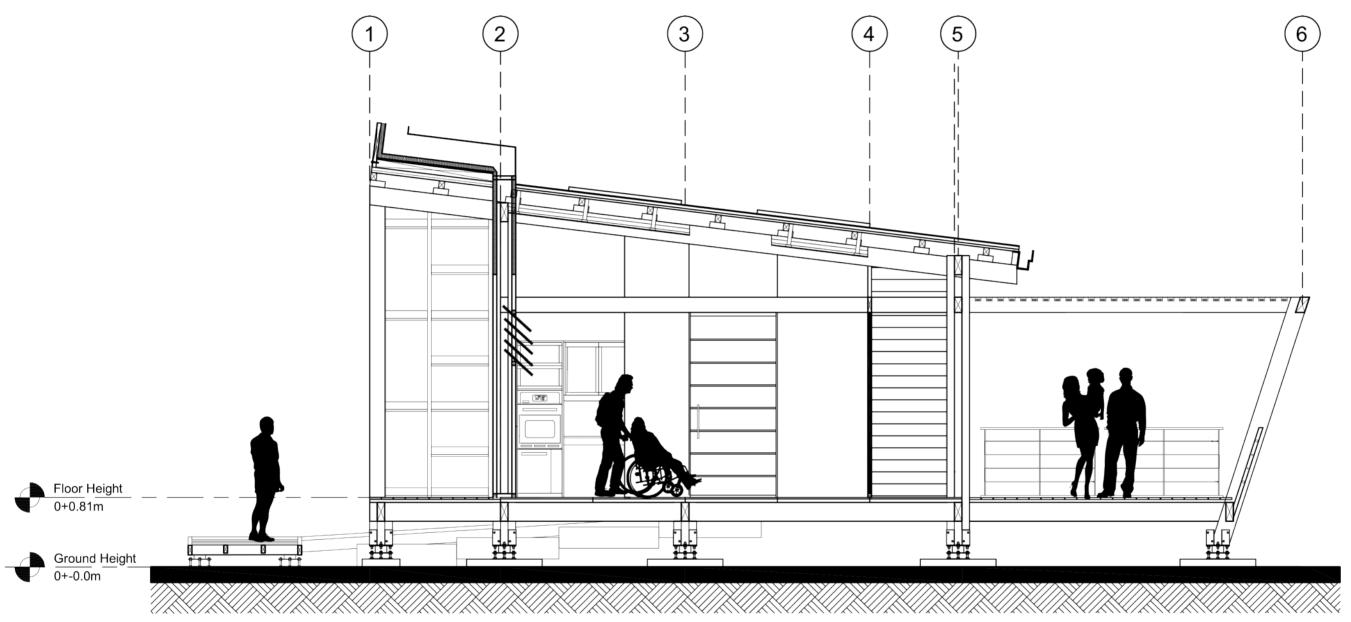
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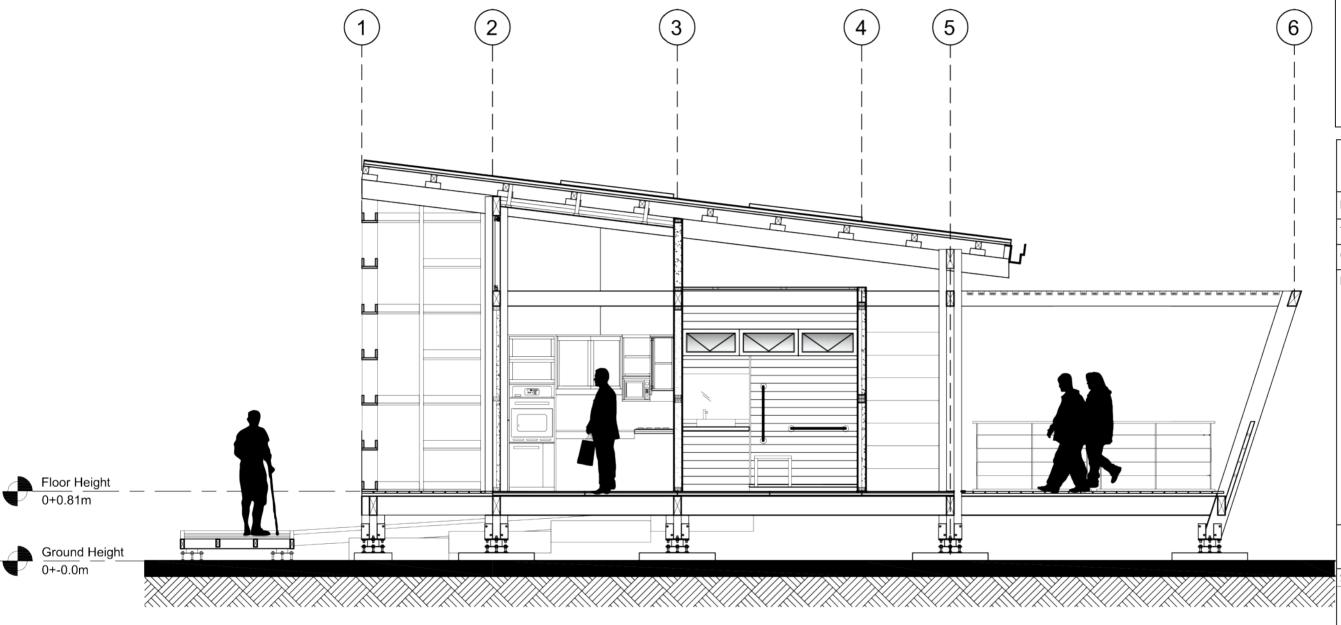
Date:11/3/2014

AR-212



SECTION B-B





SECTION C-C

TEC TEAM

Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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Sheet title

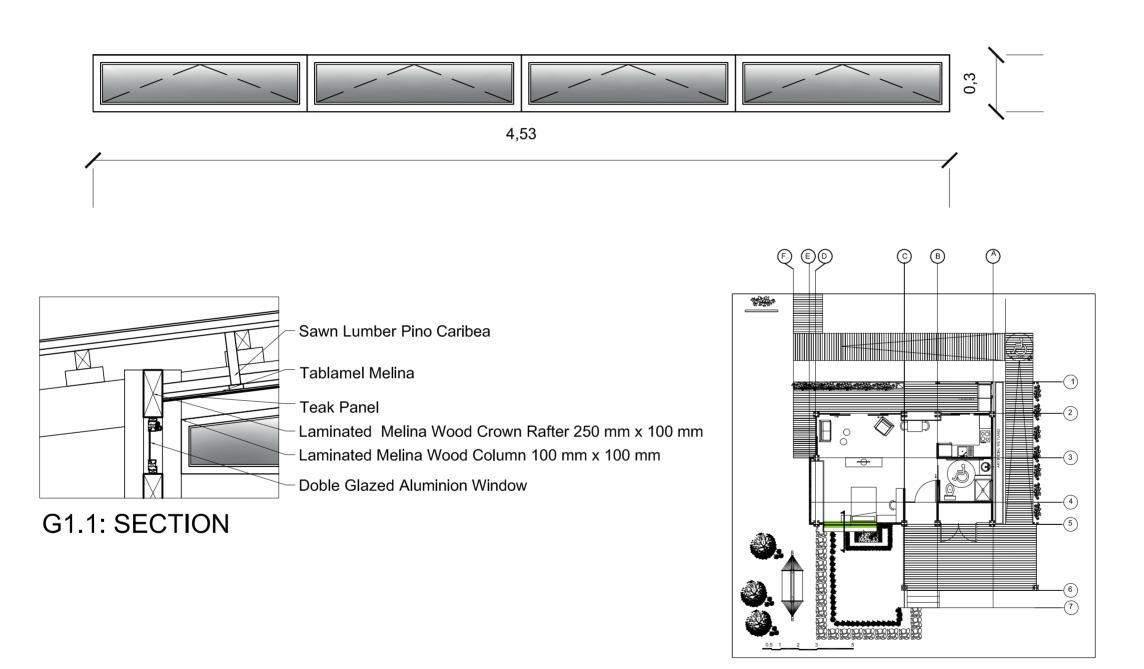
Transversal section

Content: -Section C-C

Scale: 1:50

Date: 11/3/2014

G1.1: WINDOW DETAILS



G1.1: LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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Sheet title

Window Schedule and Details

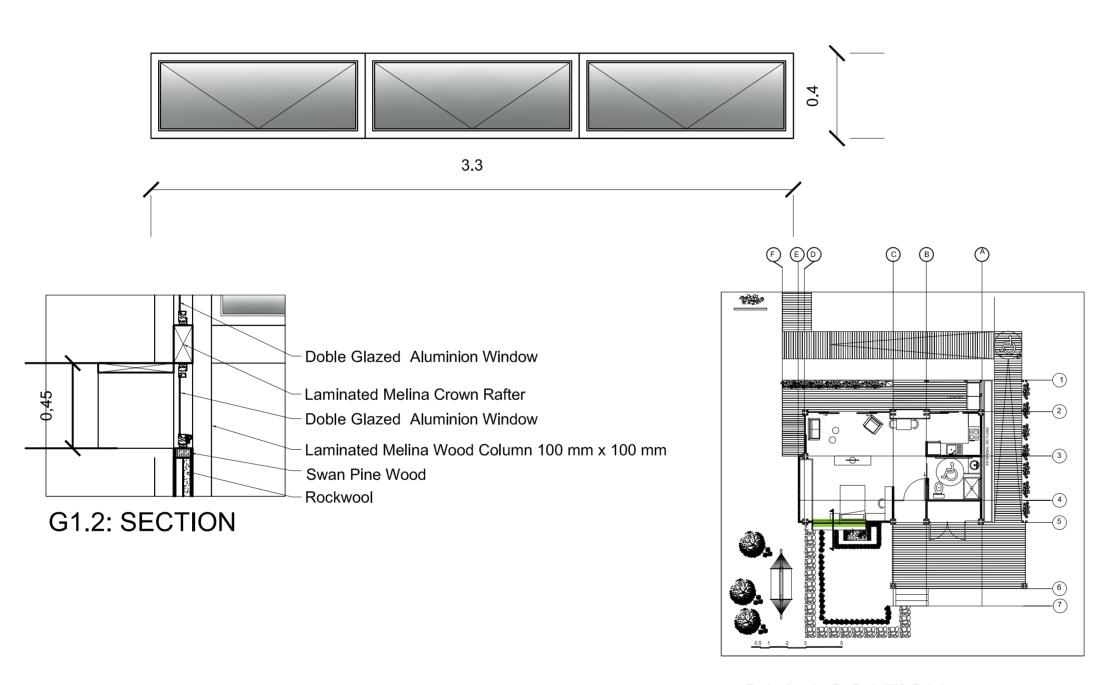
Content: -Window elevation -Window section

-Location

Scale: 1:20

Date: 11/3/2014

G1.2: WINDOW DETAILS



G1.2: LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of architecture

Sheet title

Window Schedule and Details

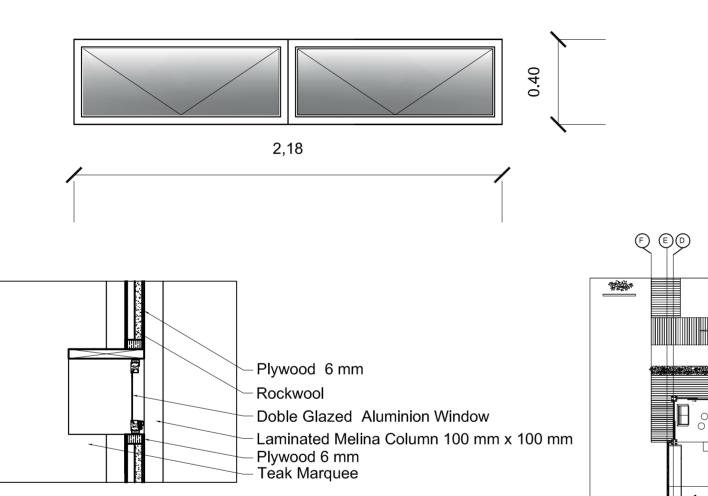
Content: -Window elevation -Window section

-Location

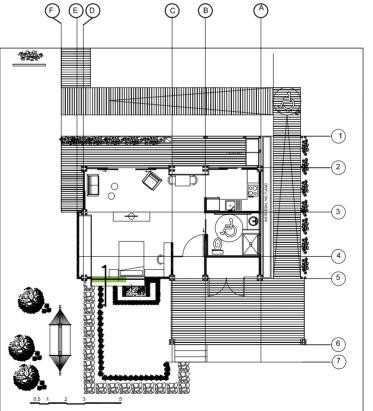
Scale: 1:20

Date: 11/3/2014

G1.3: WINDOW DETAILS



G1.3: SECTION



G1.3: LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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Sheet title

Window Schedule and Details

Content: -Window elevation

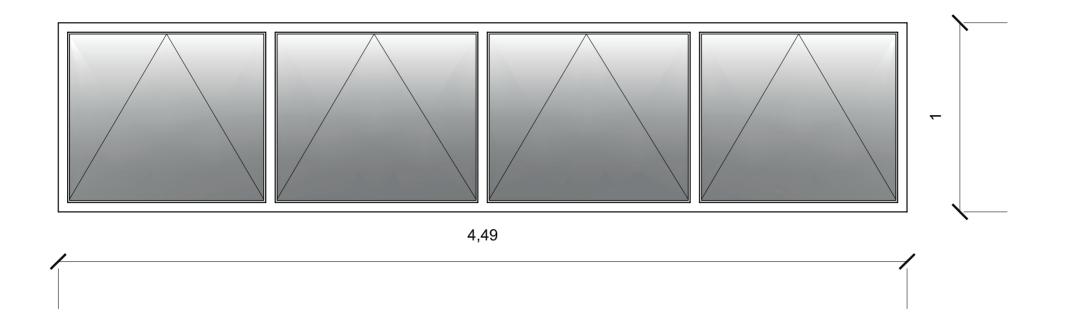
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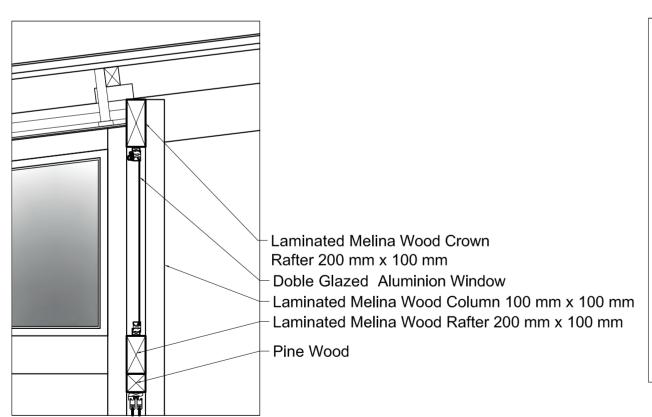
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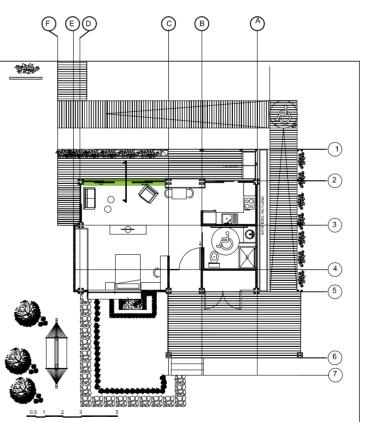
Date: 11/3/2014

G3: WINDOW DETAILS





G3: SECTION



G3: LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

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Sheet title

Window Schedule and Details

Content: -Window elevation

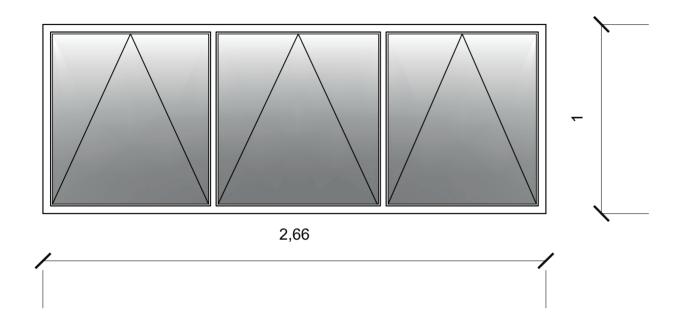
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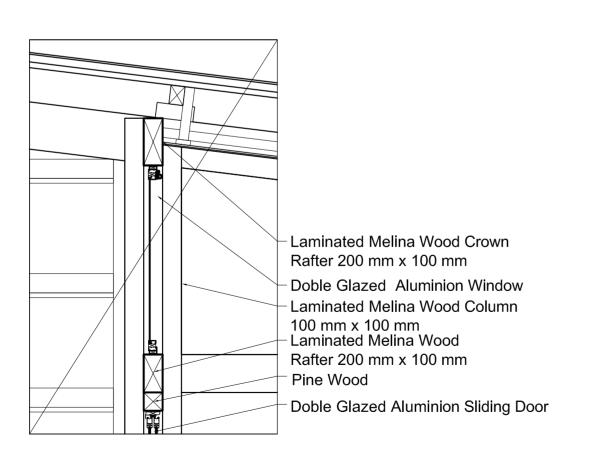
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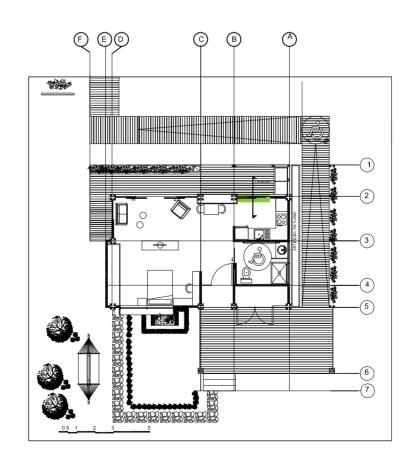
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Date: 11/3/2014

G4: WINDOW DETAILS







G4: LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica
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Sheet title

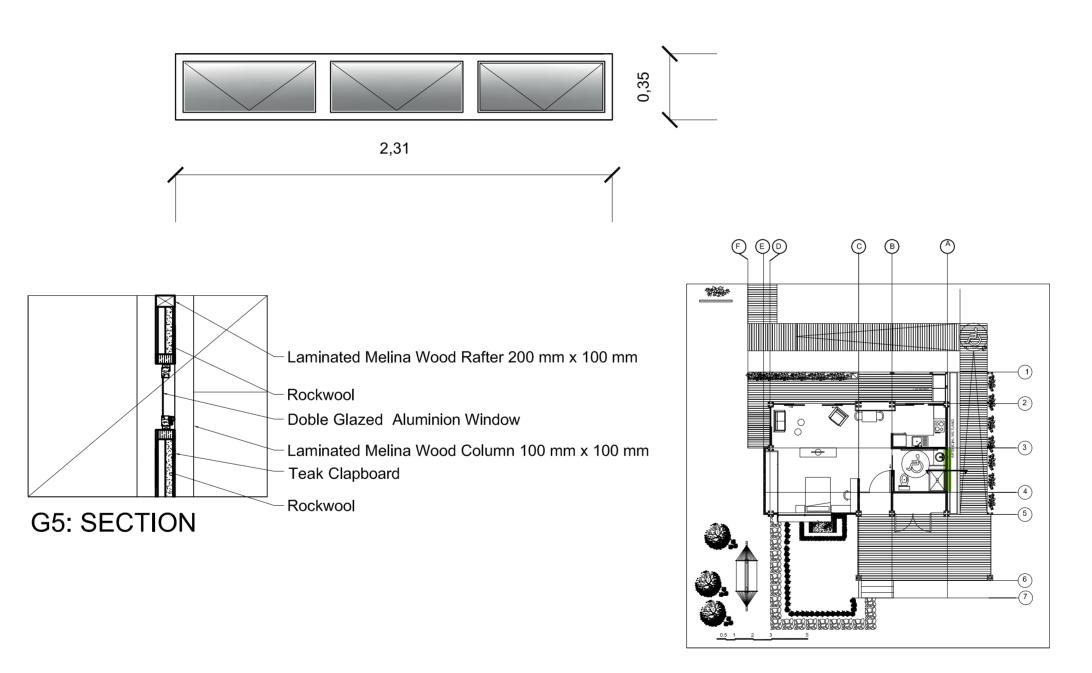
Window Schedule and Details

- -Window elevation
- -Window section
- -Location

Scale: 1:20

Date: 11/3/2014

G5: WINDOW DETAILS



G5: LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

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Window Schedule and Details

Content: -Window elevation

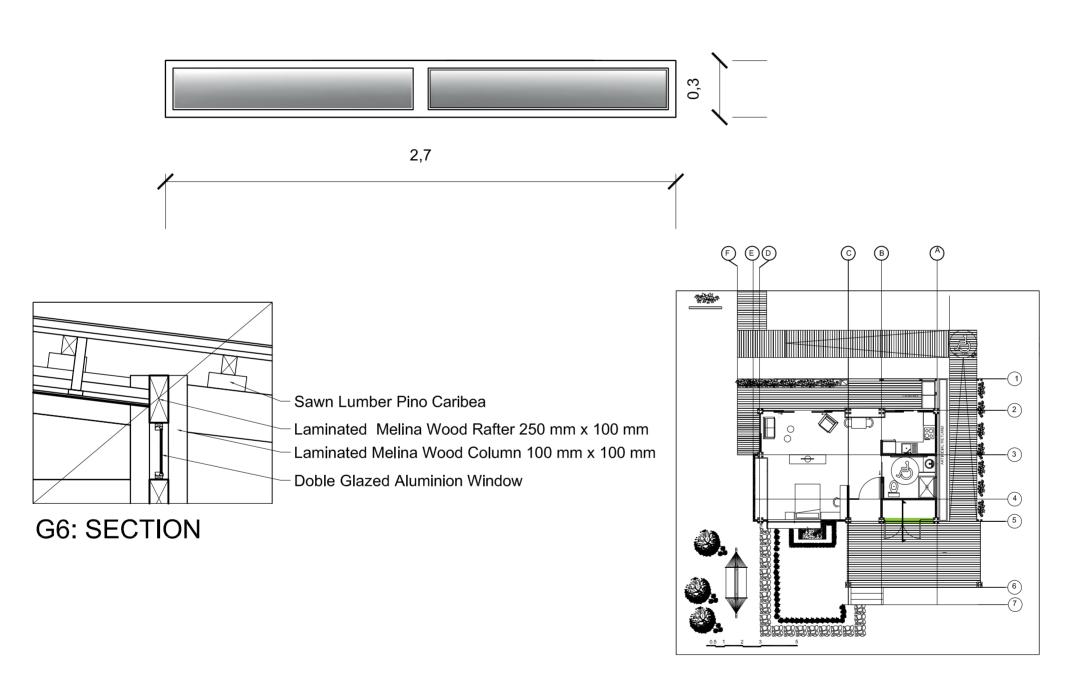
-Window section

-Location

Scale: 1:20

Date: 11/3/2014

G6: WINDOW DETAILS



G6: LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

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Sheet title

Window Schedule and Details

Content: -Window elevation

-Window section

-Location

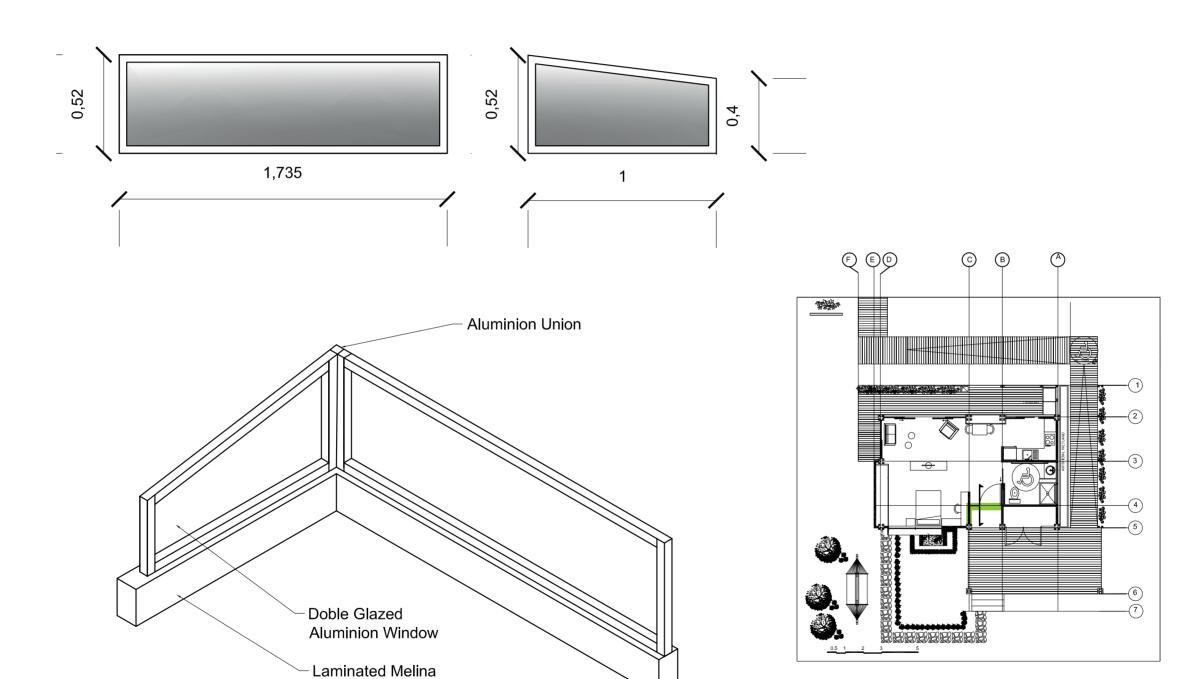
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Date: 11/3/2014

G7 End G7.1: WINDOW DETAILS

Wood Rafter 200 mm

x 100 mm







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Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

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Sheet title

Window Schedule and Details

Content: -Window elevation -Window section

-Location

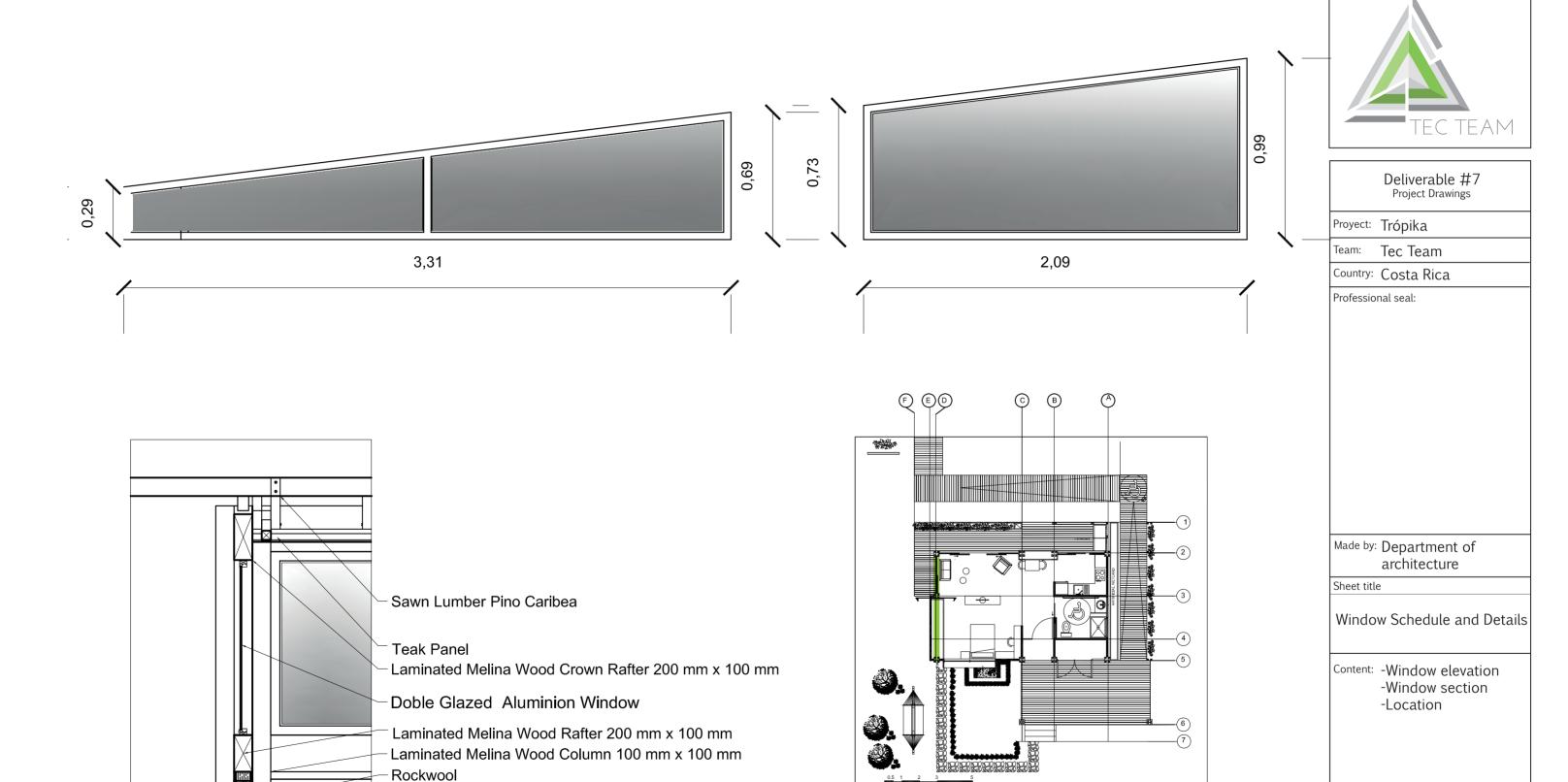
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G7: LOCATION

Date: 11/3/2014

G2 and G2.1: WINDOW DETAILS





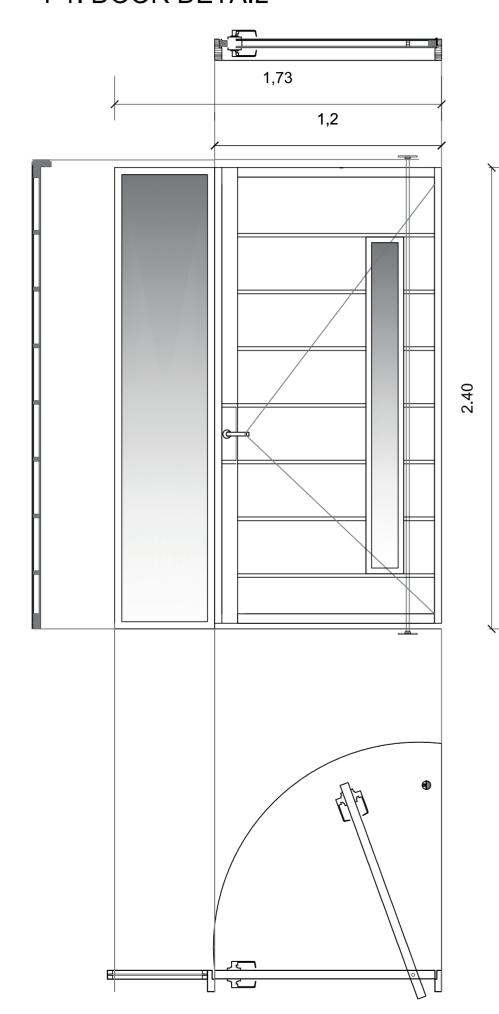
G2/G2.1: LOCATION

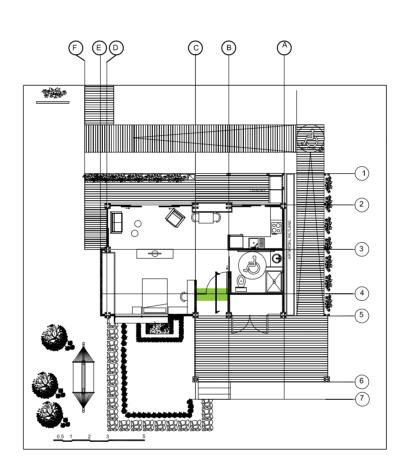
G2/G2.1: SECTION

Scale: 1:20

Date: 11/3/2014

P1: DOOR DETAIL





P1: LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of architecture

Sheet title

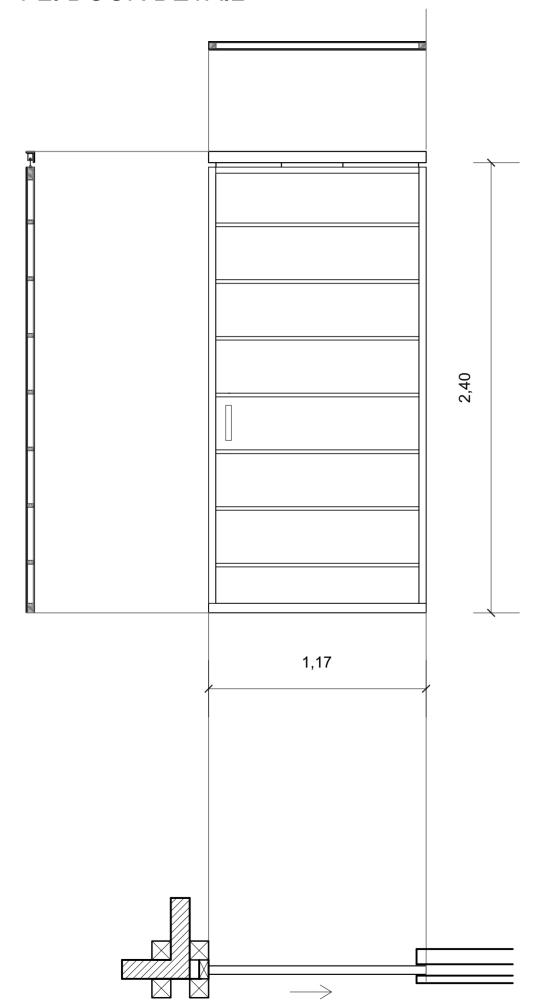
Door Schedule and Details

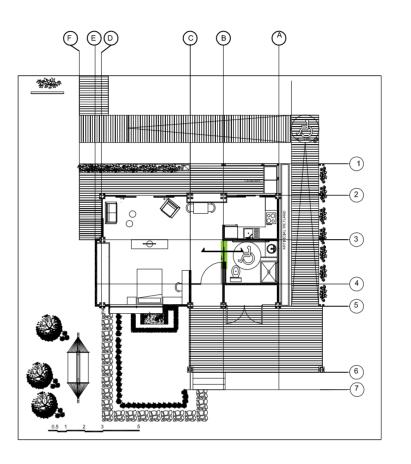
Content: -Door detail -Location

Scale: 1:20

Date: 11/3/2014

P2: DOOR DETAIL





P2: LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of architecture

Sheet title

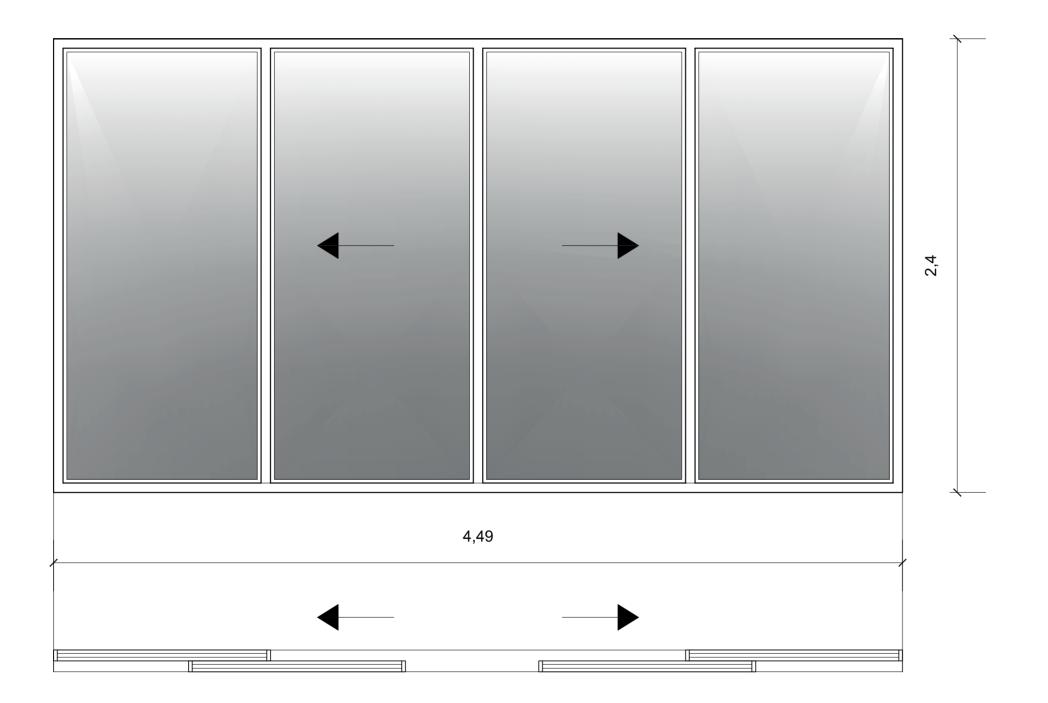
Door Schedule and Details

Content: -Door detail -Location

Scale: 1:20

Date: 11/3/2014

P3: DOOR DETAIL







Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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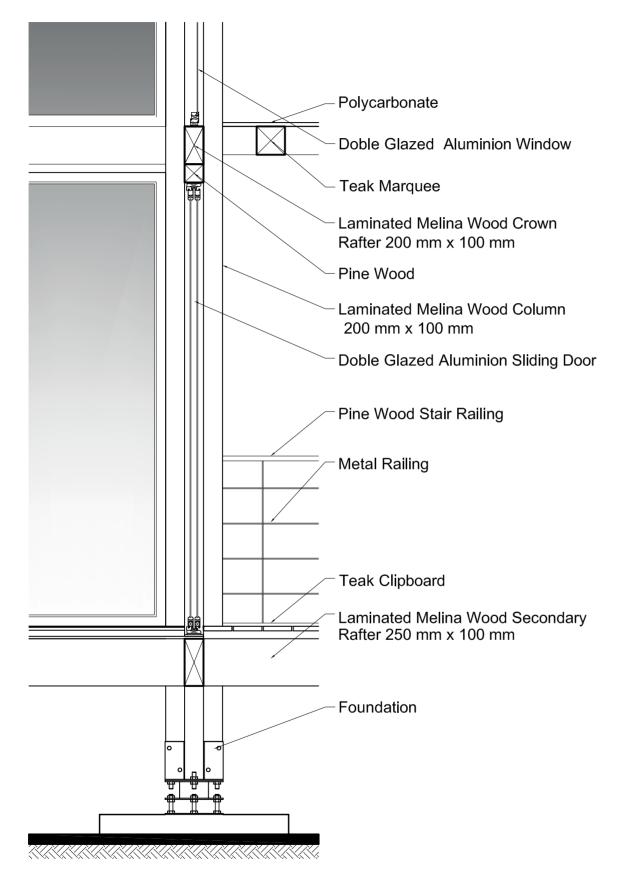
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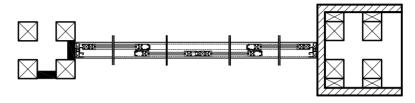
Content: -Door elevation

Scale: 1:20

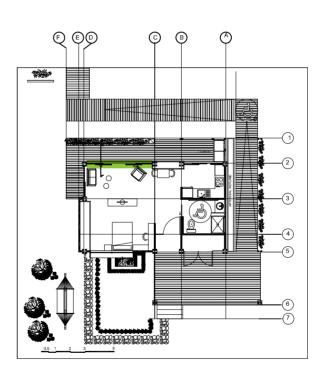
Date: 11/3/2014







P3: Section Detail



P3: LOCATION





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of architecture

Sheet title

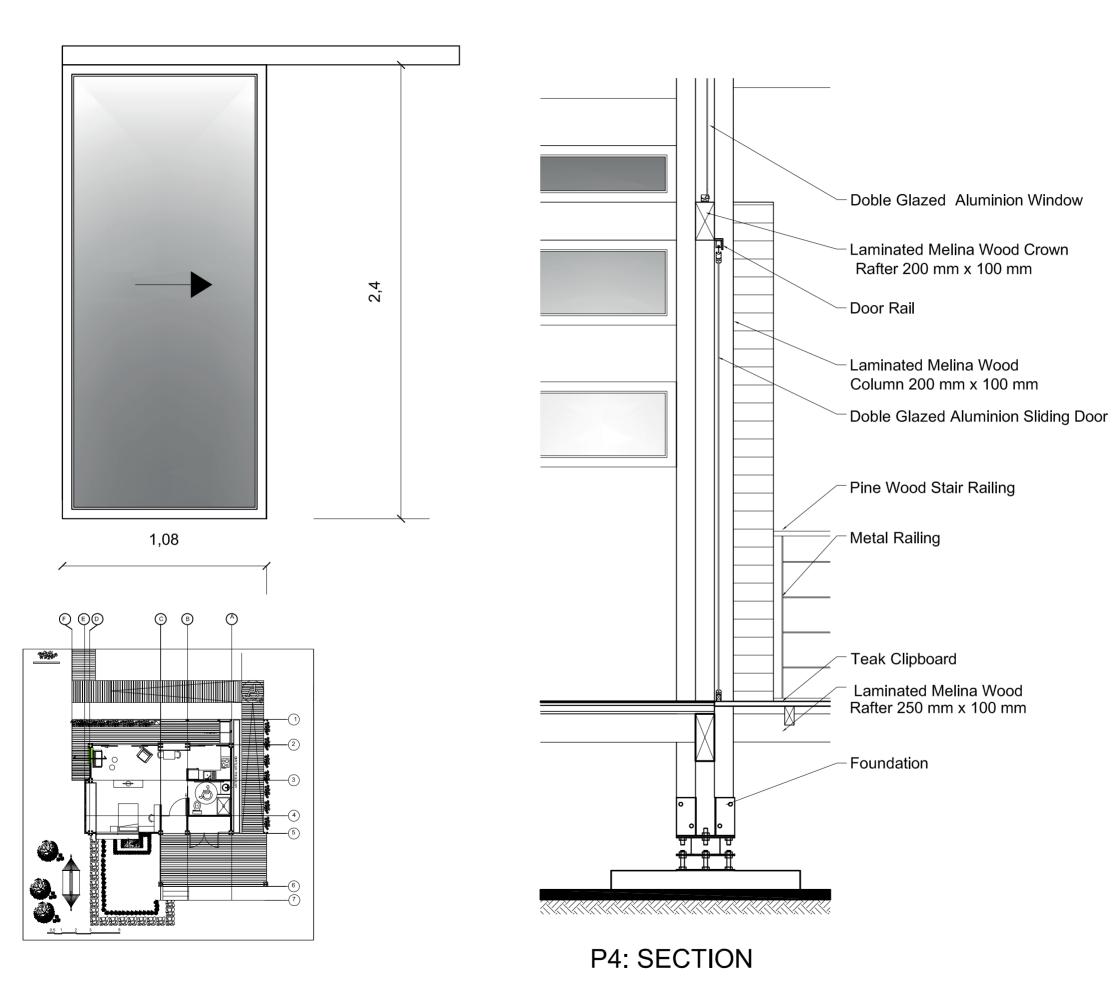
Door Schedule and Details

Content: -Door section -Location

Scale: 1:20

Date: 11/3/2014

P4: DOOR DETAIL









Deliverable #7 Project Drawings		
Proyect: Trópika		
Team: Tec Team		
Country: Costa Rica		
Professional seal:		

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architecture

Sheet title

Door Schedule and Details

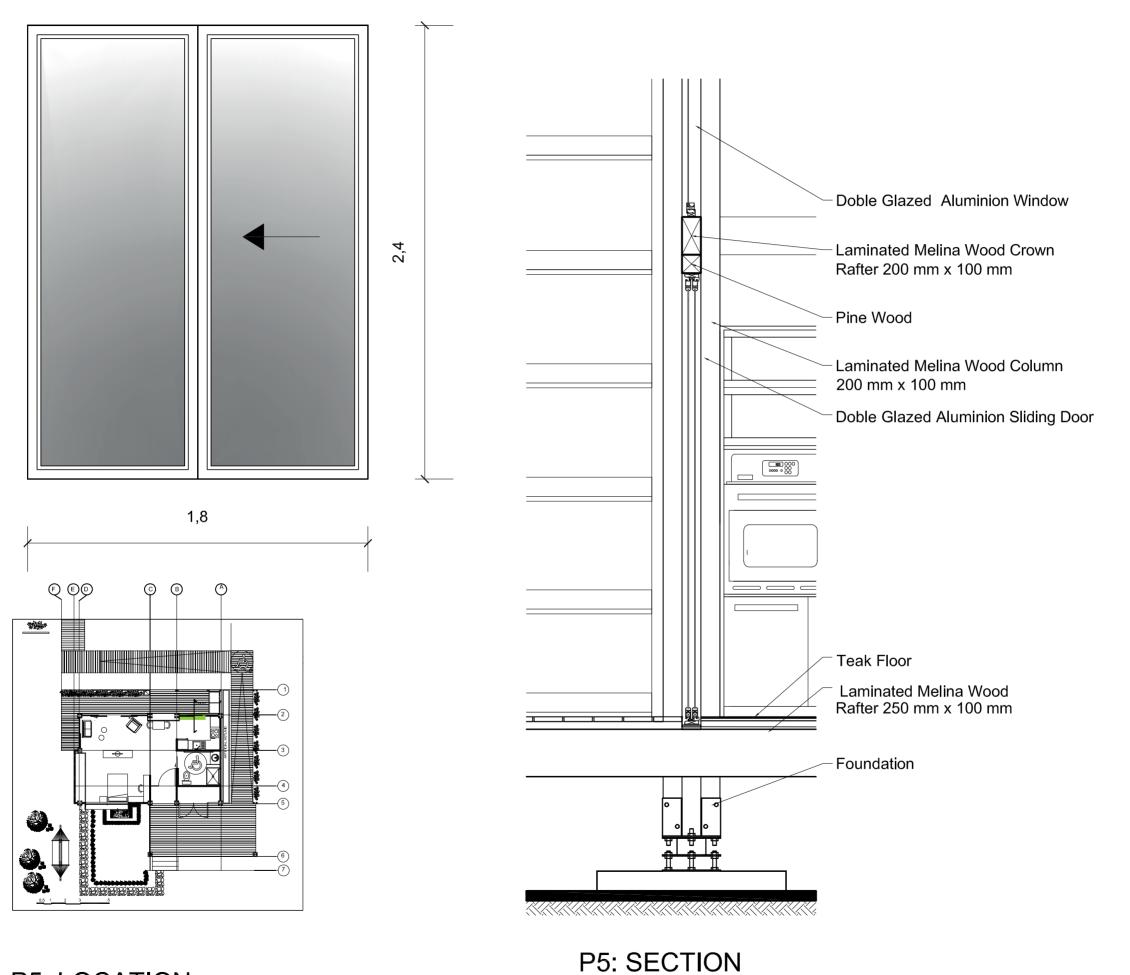
Content: -Door elevation -Door section

-Location

Scale: 1:20

Date: 11/3/2014

P5: DOOR DETAIL









Deliverable #7 Project Drawings		
Proyect: Trópika		
Team: Tec Team		
Country: Costa Rica		
Professional seal:		

Made by: Department of architecture

Sheet title

Door Schedule and Details

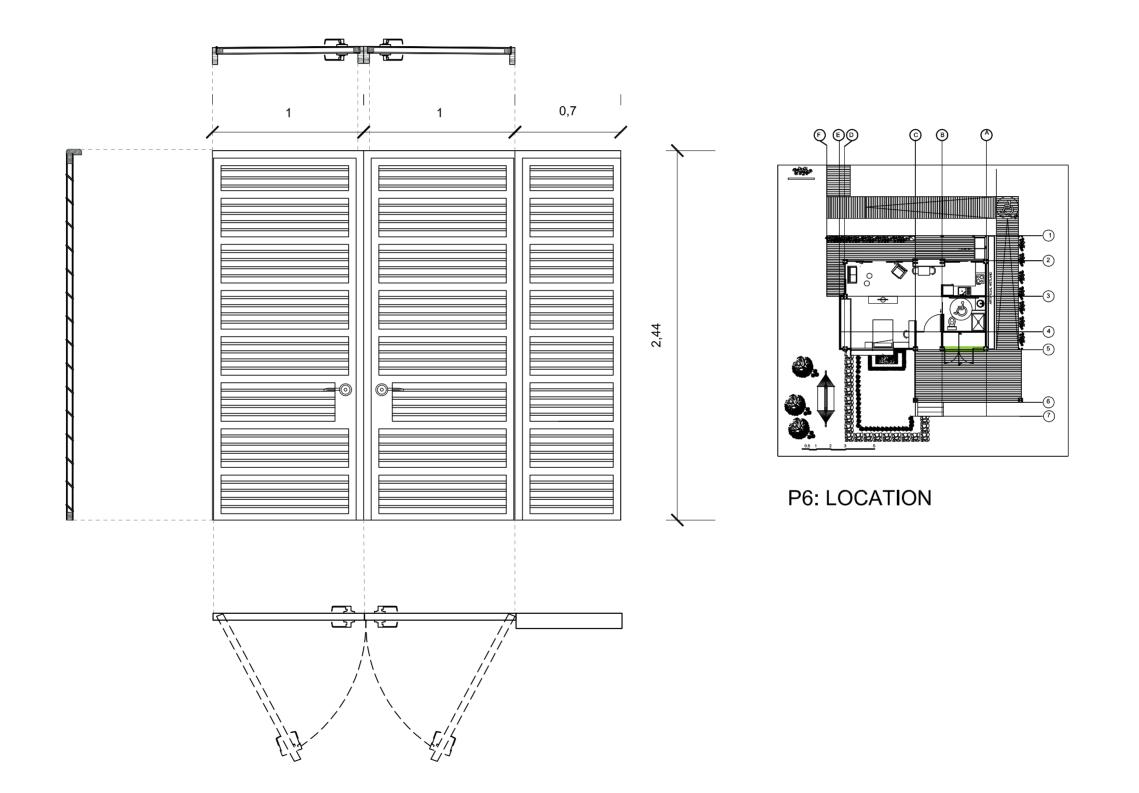
Content: -Door elevation -Door section

-Location

Scale: 1:20

Date: 11/3/2014

P6: DOOR DETAIL







Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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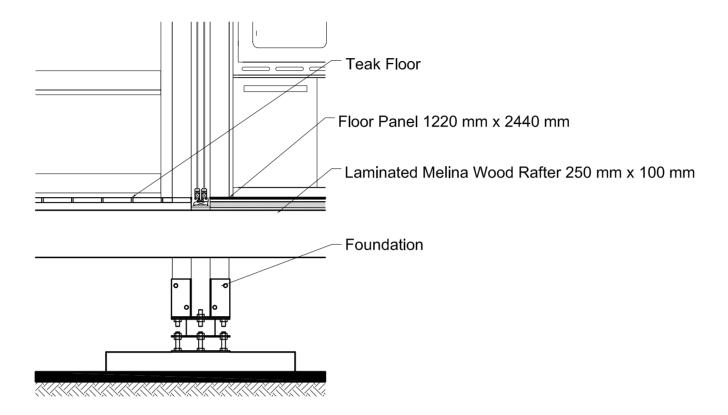
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Door Schedule and Details

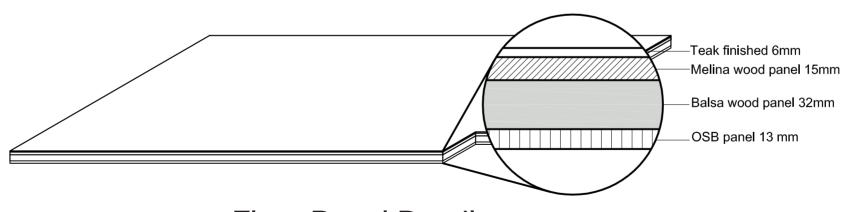
Content: -Door detail -Location

Scale: 1:20

Date: 11/3/2014



Floor Section



Floor Panel Detail Without scale





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Team: Tec Team

Country: Costa Rica

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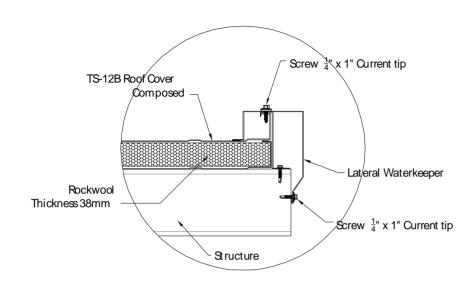
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Floor Construction Details

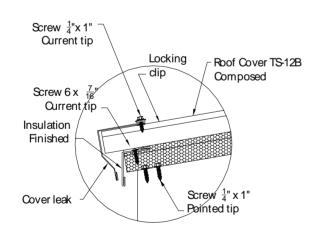
Content: -Floor section -Floor panel detail

Scale: 1:20

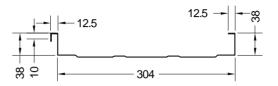
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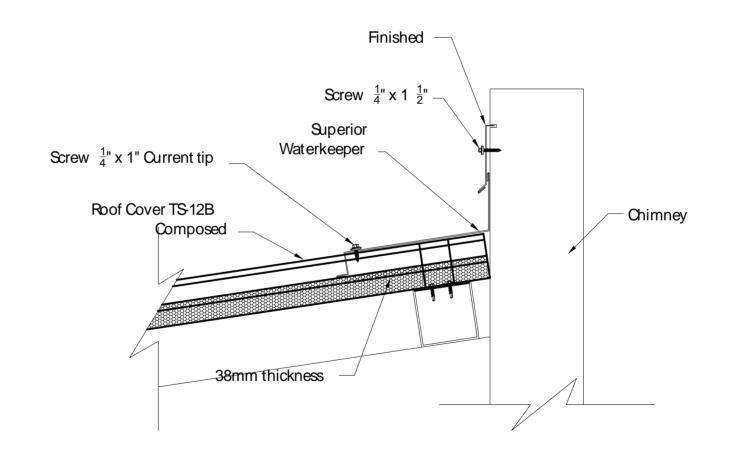
Detail for TS-12B Composed Lateral Waterkeeper



Detail for the TS-12B Composed Cover leak



TS-12B perfil



Detail of TS-12B Composed Superior Finished and Waterkeeper





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Team: Tec Team

Country: Costa Rica

Professional seal:

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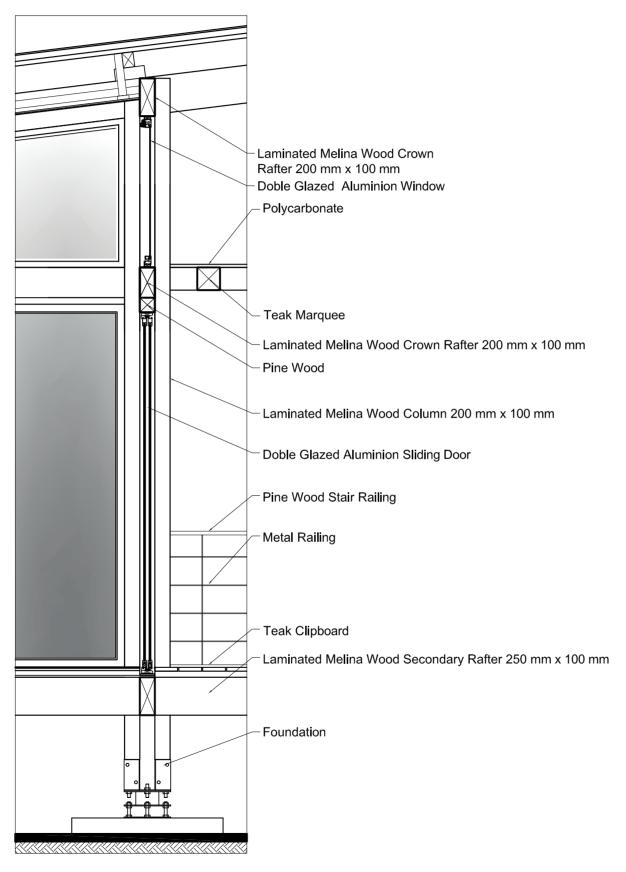
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Floor Construction Details

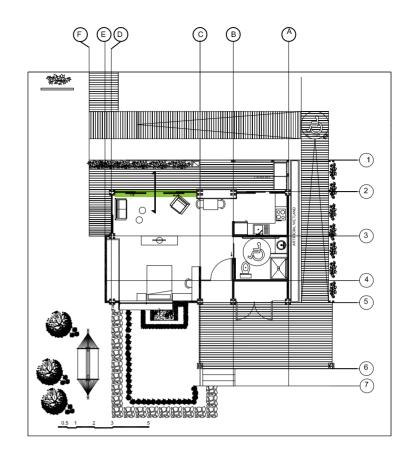
Content: -Roof details

Scale: 1:20

Date: 11/3/2014



P3: SECTION



LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

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Professional seal:

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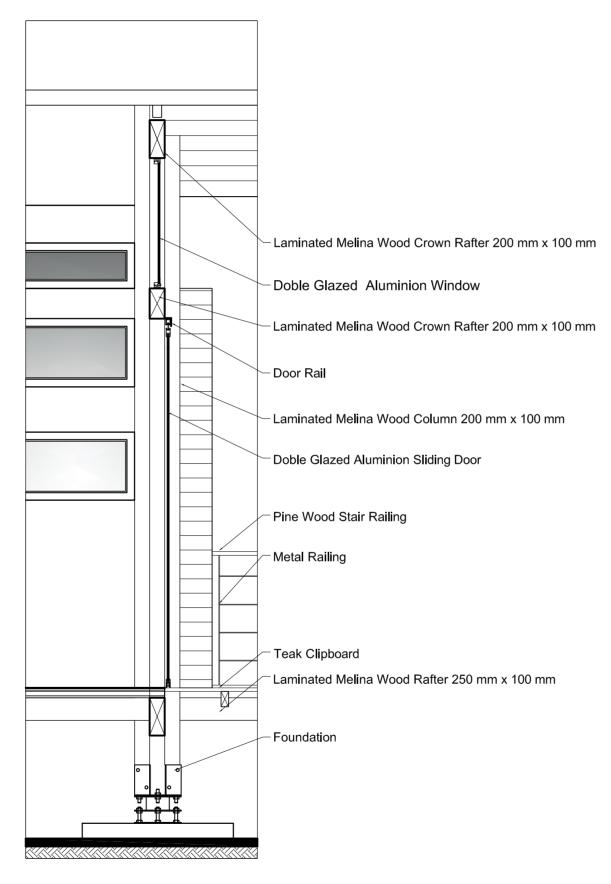
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Wall Construction Details

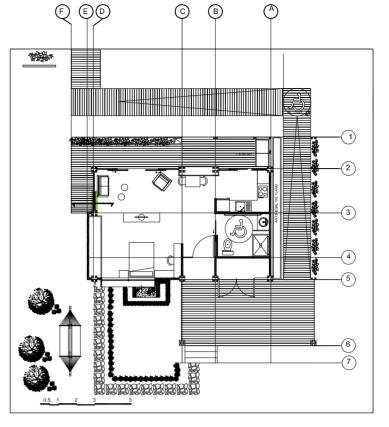
Content: -Wall section -Location

Scale: 1:20

Date: 11/3/2014



P4: SECTION







Deliverable #7
Project Drawings

Proyect: Trópika

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Country: Costa Rica

Professional seal:

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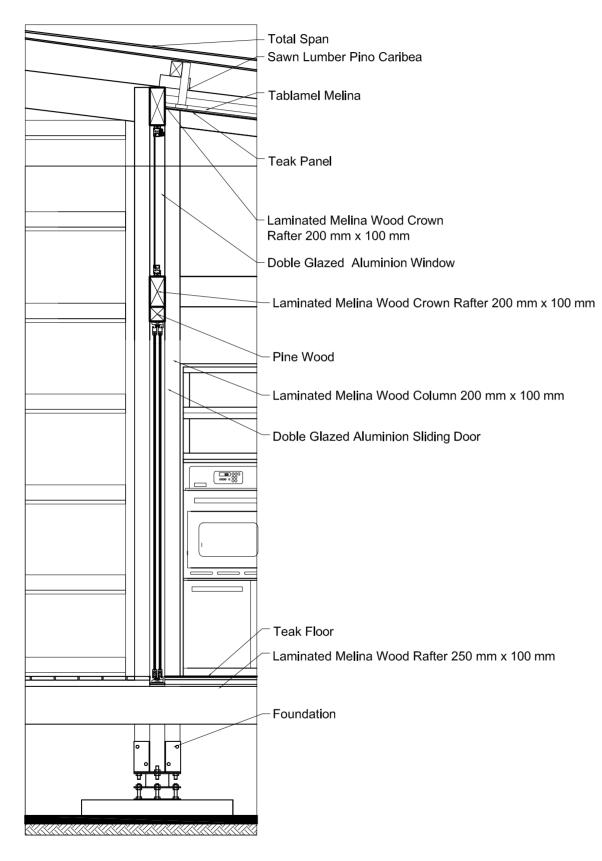
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Wall Construction Details

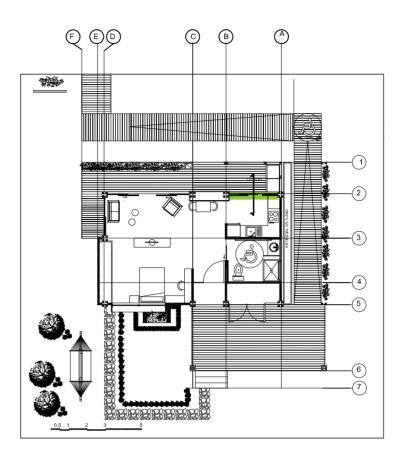
Content: -Wall section -Location

Scale: 1:20

Date: 11/3/2014







LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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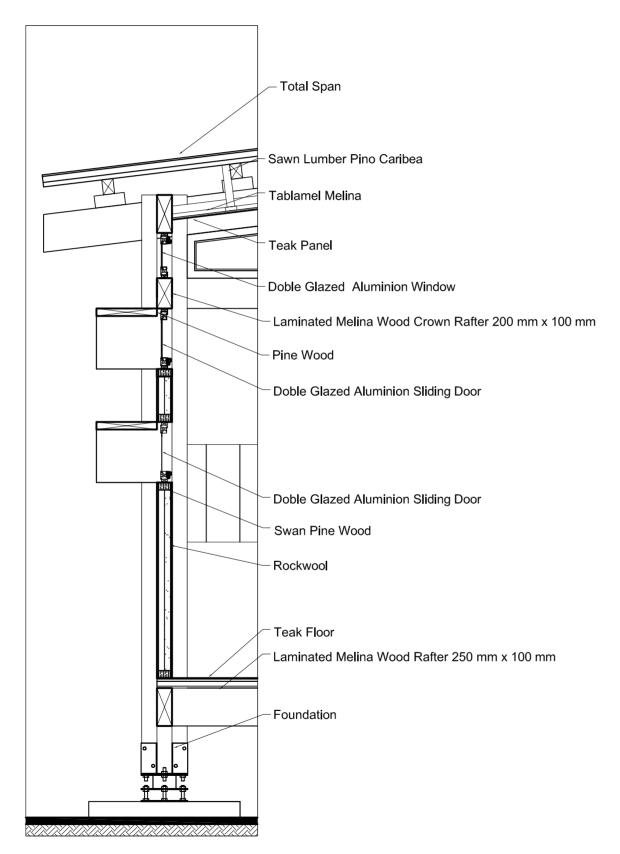
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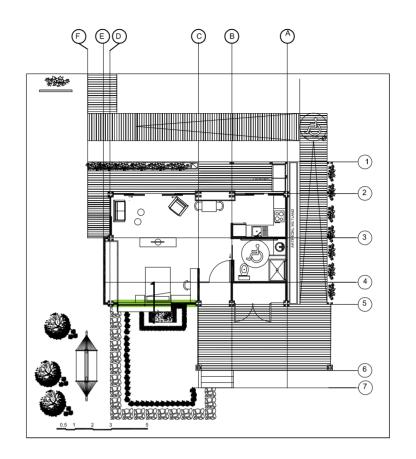
Wall Construction Details

Content: -Wall section -Location

Scale: 1:20

Date: 11/3/2014





LOCATION





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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Sheet title

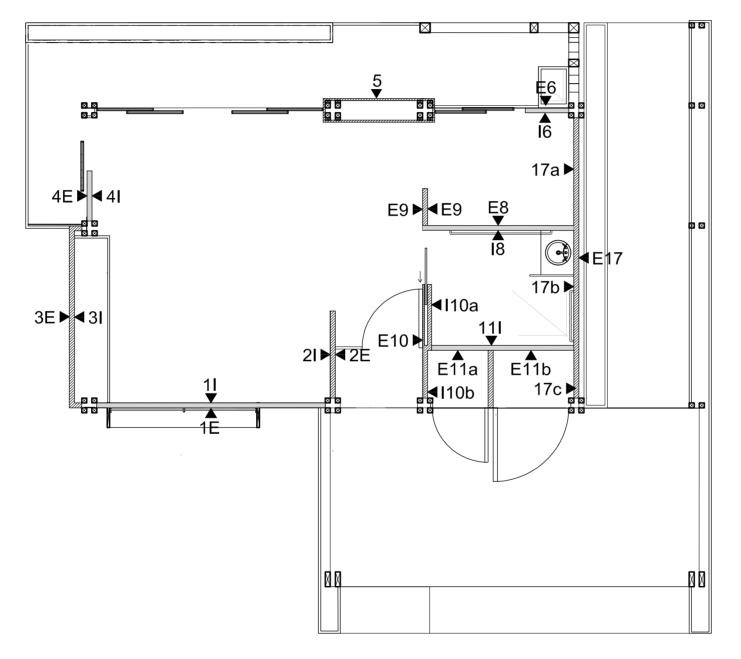
Wall Construction Details

Content: -Wall section -Location

Scale: 1:20

Date: 11/3/2014





0.5 1 2 3 5

Walls location plan





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of construction

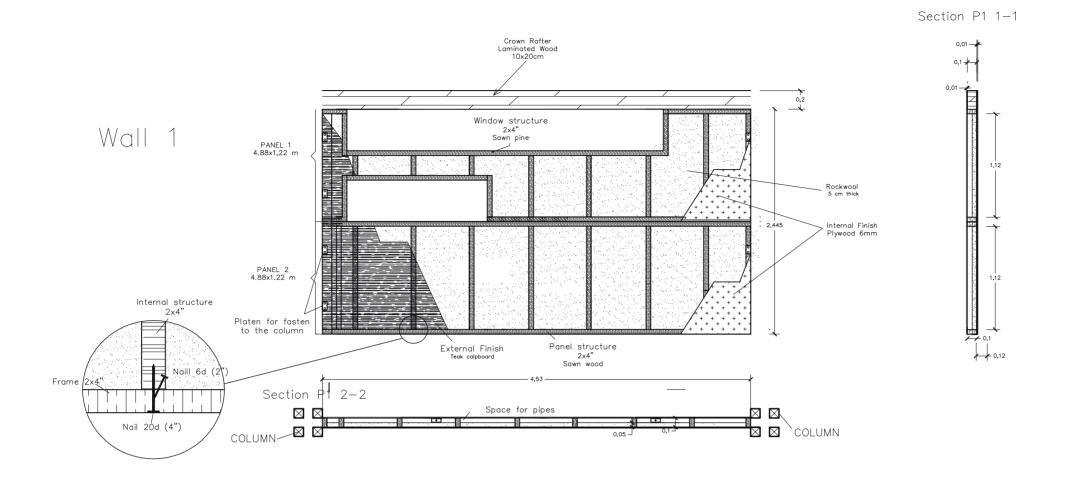
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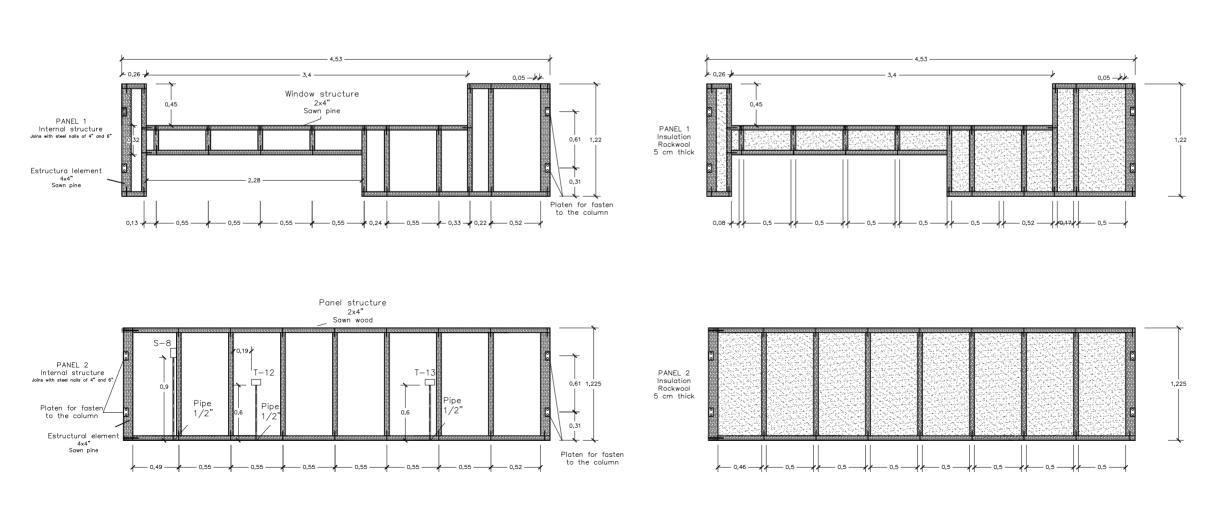
Partitions Details

Content: -House plan

Scale: 1:75

Date: 11/3/2014









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Country: Costa Rica

Professional seal:



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Made by: Department of architecture

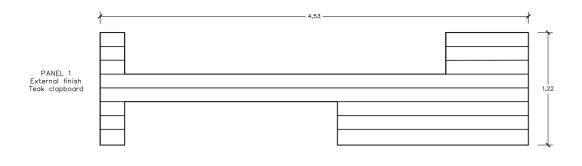
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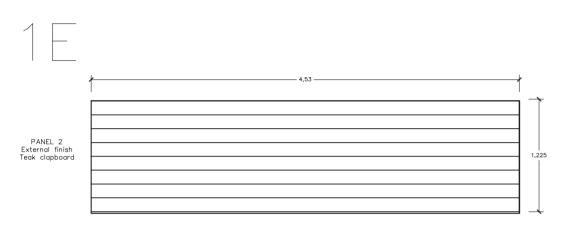
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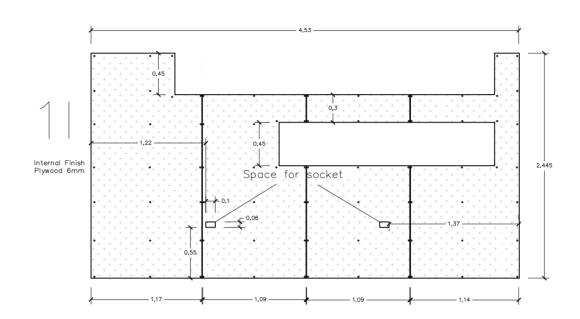
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Scale: 1:40

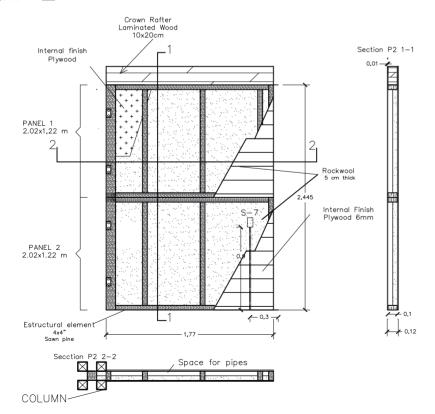
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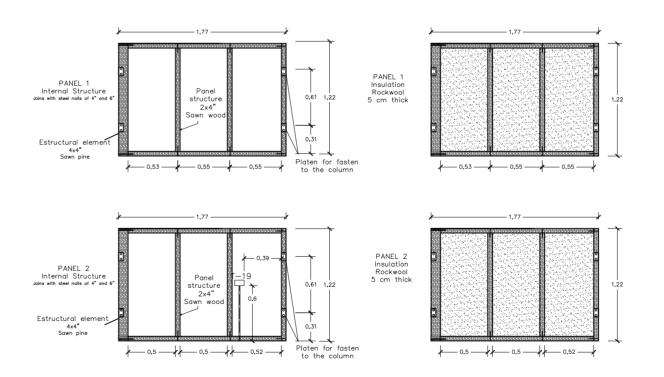






Wall 2









Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

INGENIEROS ESTRUCTURALES CONSULTORES ASOCIADOS TAL(506) 2257 7068 FAX.(506) 2257 7067 e-mail: afo@iccarinemacional.com

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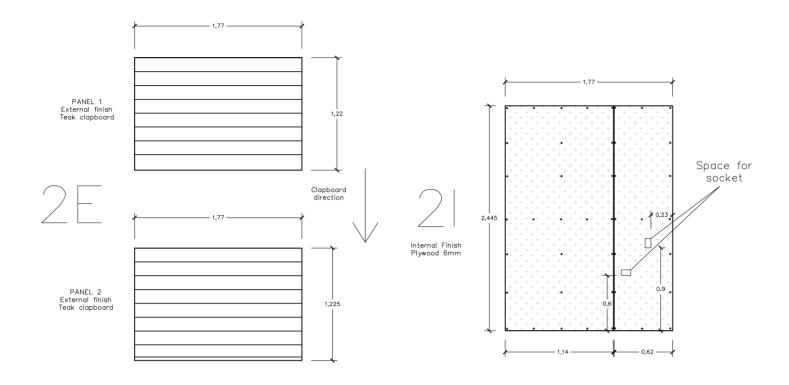
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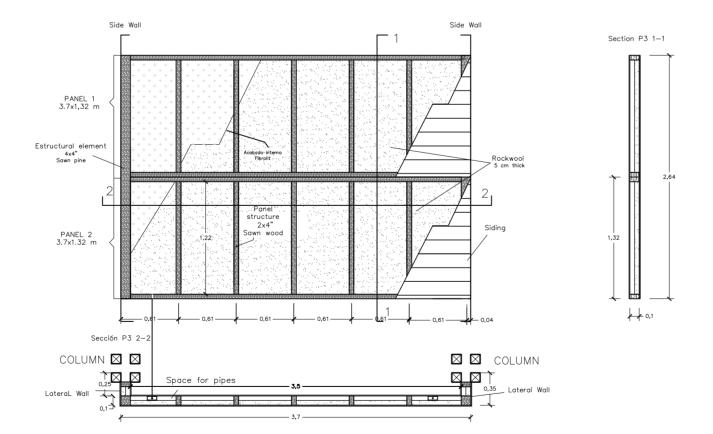
Content: -Construction details

Scale: 1:40

Date: 11/3/2014











Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



PROFESIONAL RESPONSABLE: DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

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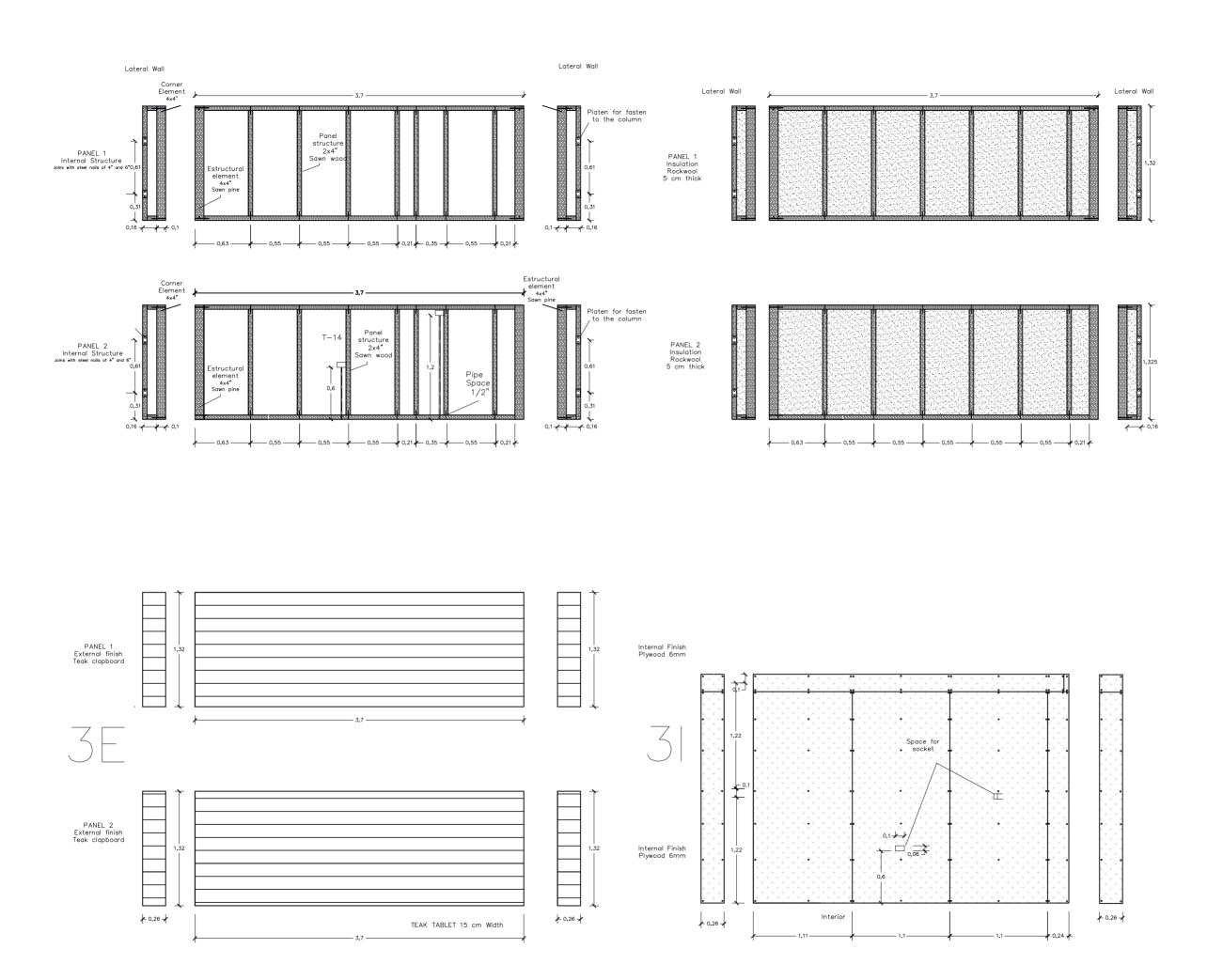
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Partitions details

Content: -Construction details

Scale: 1:40

Date: 11/3/2014







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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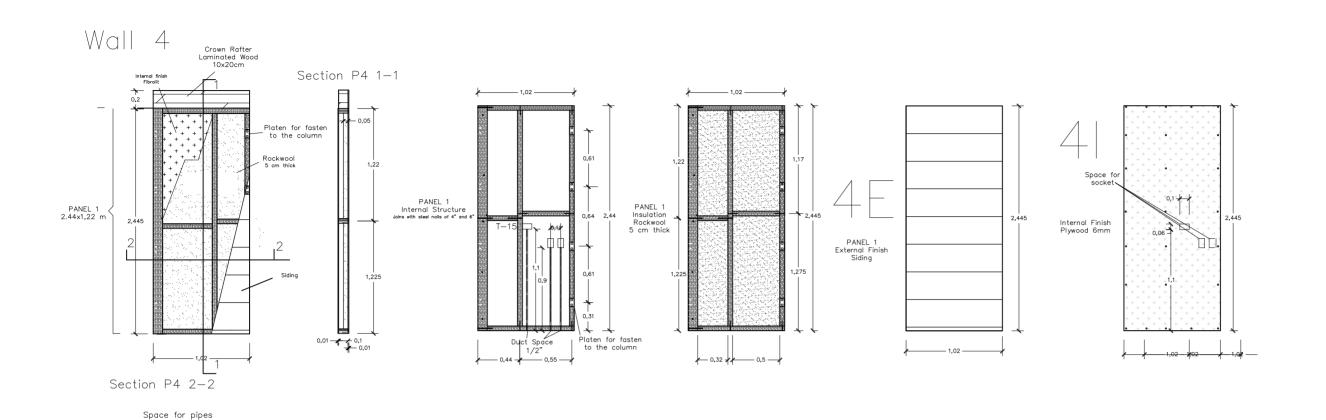
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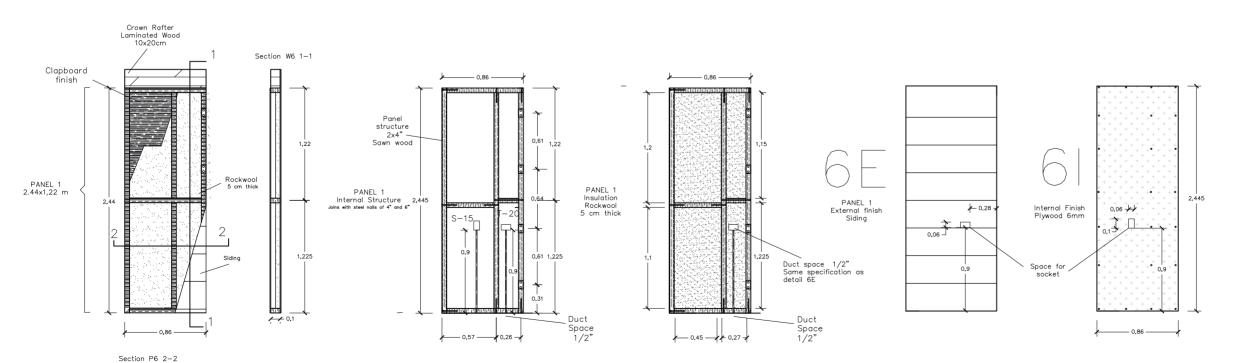
Content: -Construction details

Scale: 1:40

Date: 11/3/2014



Wall 6







Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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Sheet title

Partitions details

Content: -Construction details

Scale: 1:40

Date: 11/3/2014

Wall 7 PANEL 1 Platen for fasten to the column Duct Space 1/2" PANEL 3 6.0x1,22 m Duct Space 3/4" PANEL 1 Insulation Rockwool 5 cm thick PANEL 2 Insulation Rockwool 5 cm thick

→ 0,56 → 0,58 → 0,21 → 0,55 → 0,55 → 0,55 → 0,55 → 0,55 → 0,55 → 0,55 → 0,58 →

PANEL 3 Insulation Rockwool 5 cm thick





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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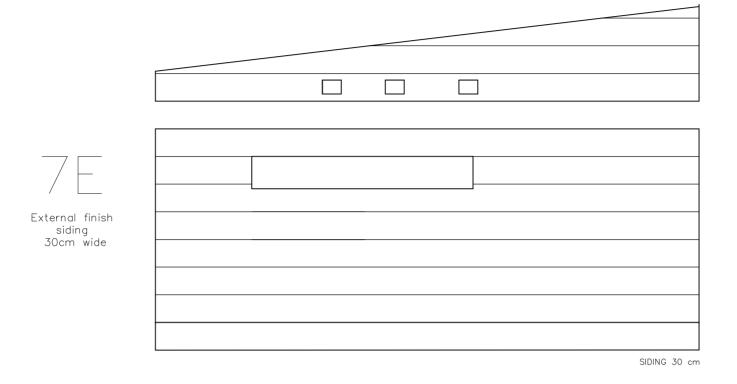
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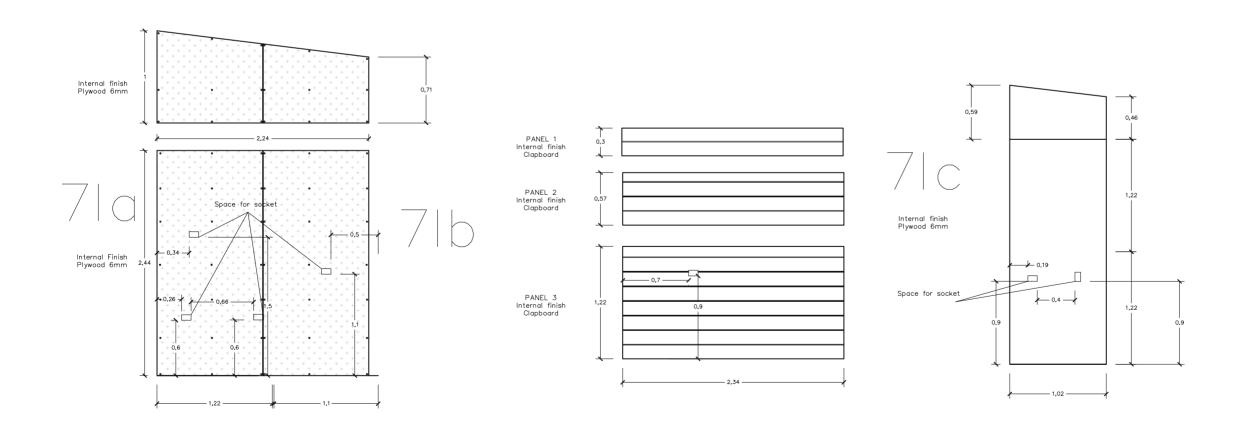
Partitions details

Content: -Construction details

Scale: 1:40

Date: 11/3/2014









Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



PROFESIONAL RESPONSABLE: DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

Made by: Department of architecture

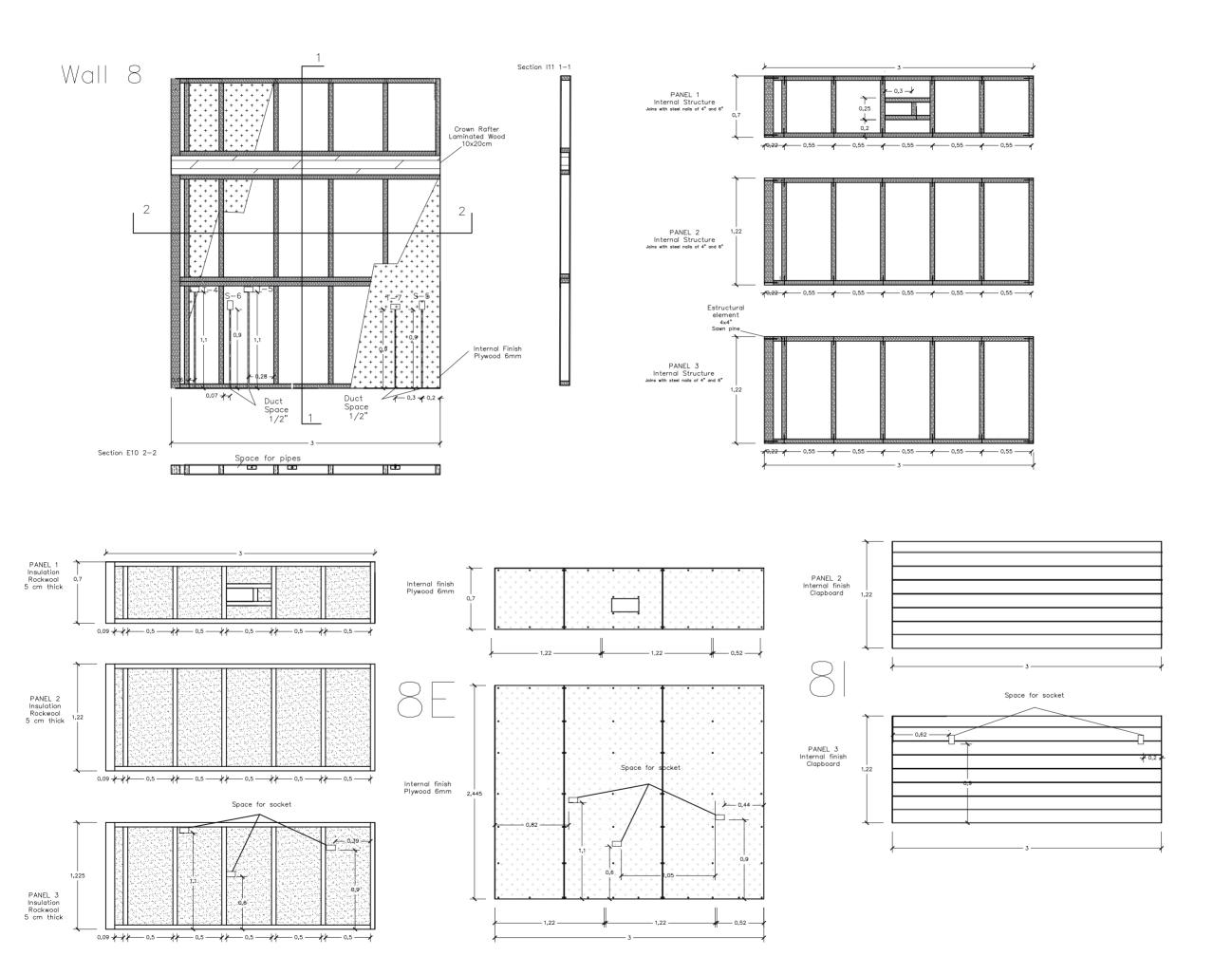
Sheet title

Partitions details

Content: -Construction details

Scale: 1:40

Date: 11/3/2014







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



TEL(506) 2257 7068 FAX (506) 225 FERNACIONAL e-mail: info@iecainternacional.com

PROFESIONAL RESPONSABLE: DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

Made by: Department of architecture

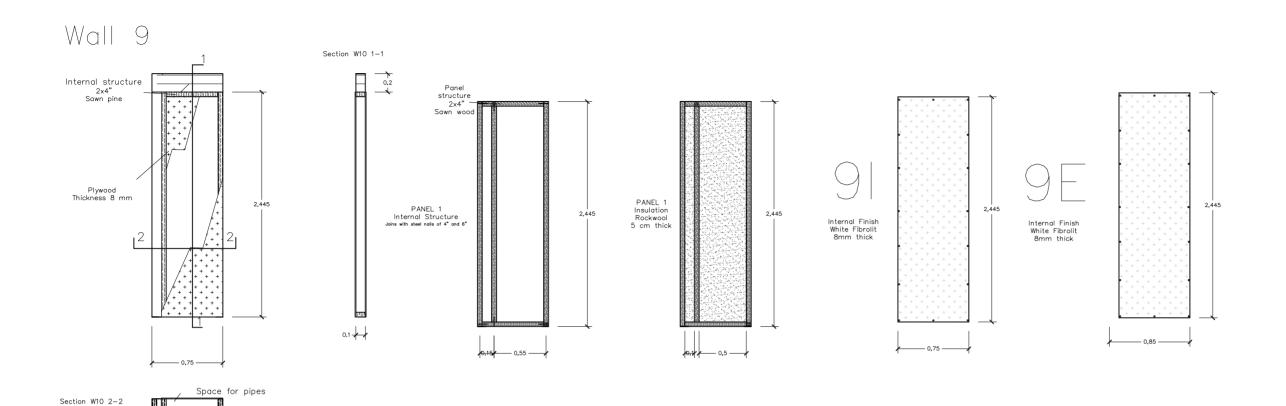
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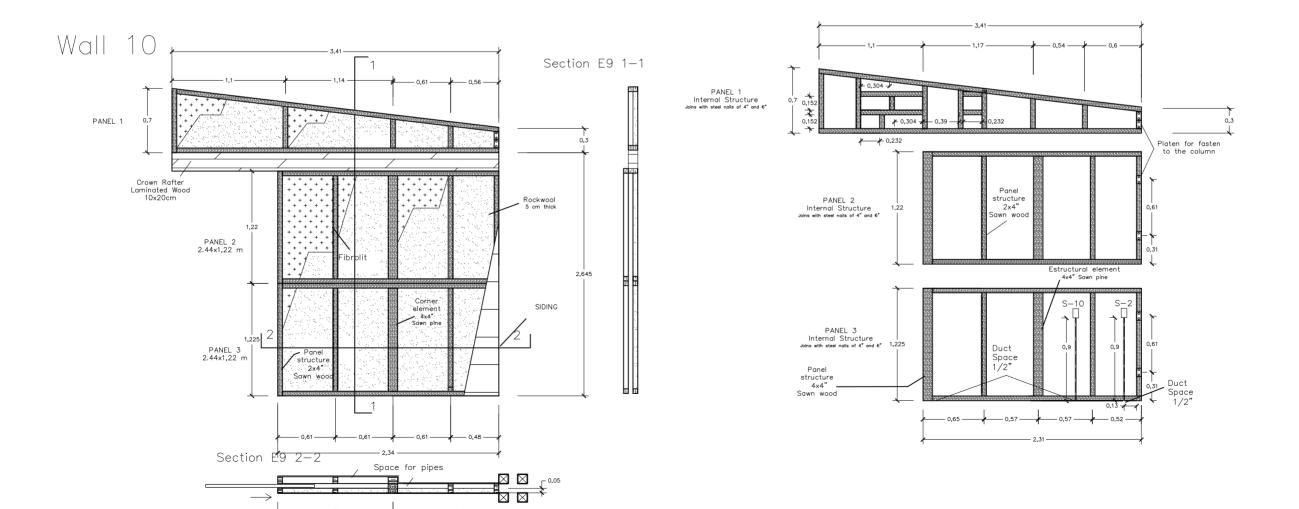
Partitions details

Content: -Construction details

Scale: 1:40

Date: 11/3/2014









Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



INGENIEROS ESTRUCTURALES CONSULTORES ASOCIADOS TEL (506) 2257 7068 FAX (506) 2257 7067

PROFESIONAL RESPONSABLE: DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

Made by: Department of architecture

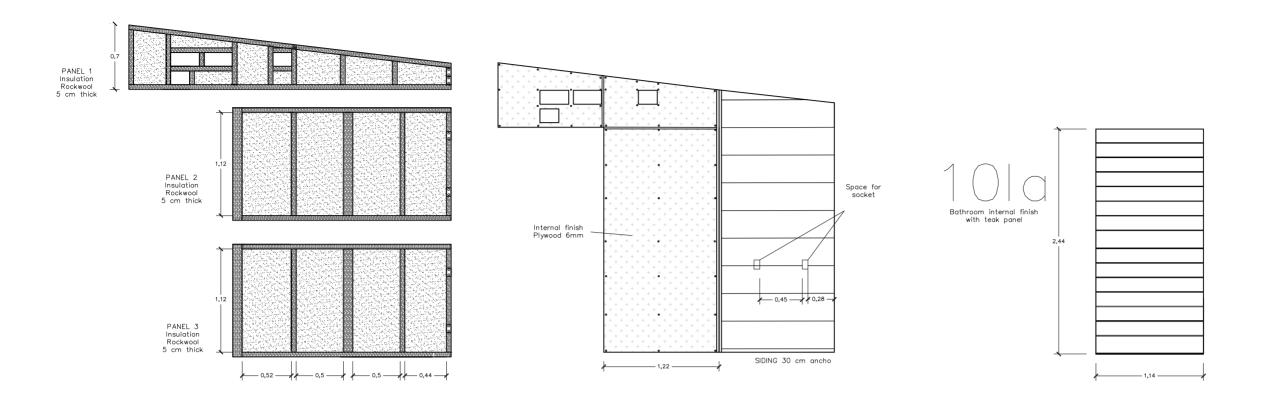
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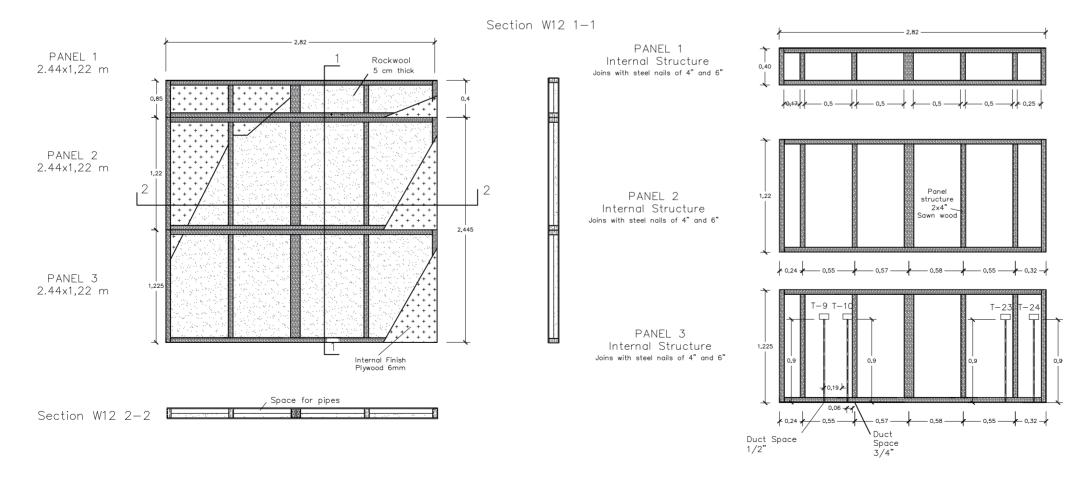
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Scale: 1:40

Date:11/3/2014



Wall 11







Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



PROFESIONAL RESPONSABLE DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B N° REG. IC 5721

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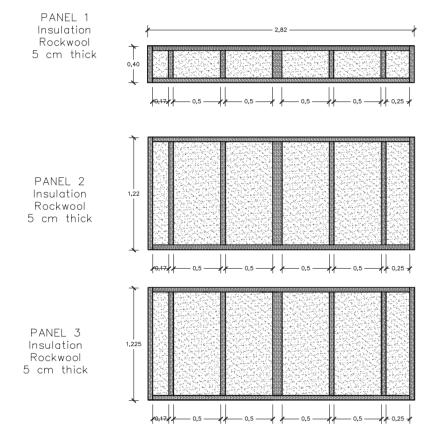
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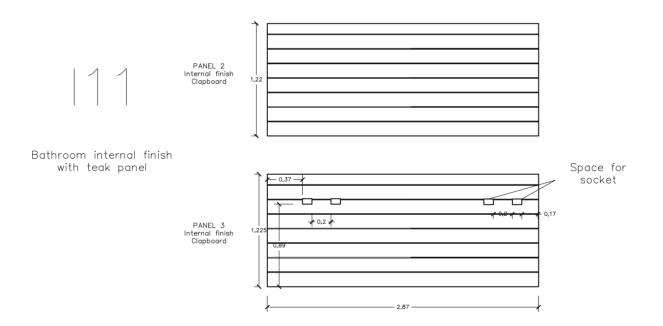
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Date: 11/3/2014









Proyect: Trópika

Team: Tec Team

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Sheet title

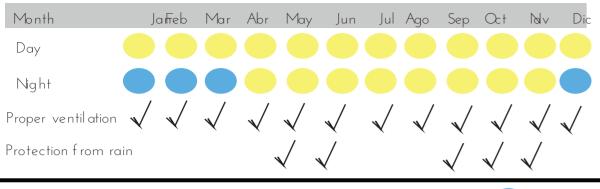
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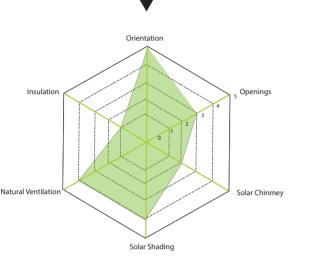
Date: 11/3/2014

Thermal stress / Mahoney



Comfort





Orientation hermal insulation



Cross ventilation Open space





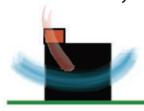
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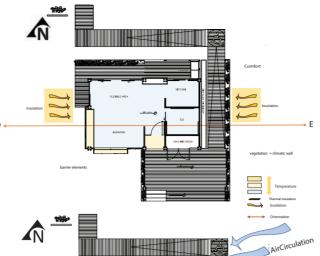


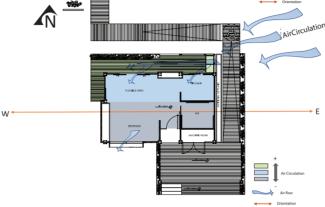
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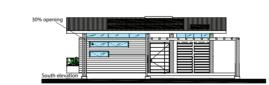
Height extention Solar chimney



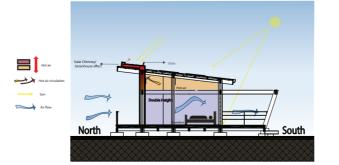












The module has been designed in order to minimize the solar heating inside the house. As a basic strate gy, we diced to orientate the prototype from East to West. Facades located in these cardinal points are solid and smaller than the ones at the North or South to avoid direct solar radiation produced at dawn and dusk.

Prevailing wind in Costa Rica comes from the north-east, reason why the north facade is open in a 70% to let fresh air go into the module. Tec Team also decided to configure the internal distribution as an open space using the minimum of walls to facilitate a free airflow.

Roof is the principal element that gives us shadow by letting long eaves that protect the module from direct radiation. Other objects that we are using, and that are very popular in our country to protect windows from the sun, are the marquees and pergolas. These elements are located on South and North facades.

The prototype orientation from east to west allow us to open the space on the larger facades located at north and south. Open the north elevation in a 70% bring us the advantage to take natural light into the module avoiding direct sunbathing. At South, we open the facade only a 30% to give privacy to the bedroom and we protect windows from solar radia tion with a marquee.

Tec Team has decided to raise the ceiling more than it is used in Costa Rica to accumulate hot air in a higher place, and then, expulse it by the solar chim ney. This process leaves fresh air in the lower spaces, right where people are located.





Deliverable #7 Project Drawings

Proyect: Trópika

Tec Team

Country: Costa Rica

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Sheet title

Passive strategies

Bioclimatic Drawings

Scale:

Date:11/3/2014

BA-011 Code:

Costa Rica is a small country located in Central America. According with the INBio (National Institute of Biodiversity), our country poses 4% of all the living species on Earth. This is a situation given by having two oceans around us, a mountain range that creates different environments along the territory and our position in the tropics that provide stable climate conditions

The IMN (National Institute of Meteorology), in its web site, specifies that Costa Rica is divided in two climatic regions: the first one has an influence from the Pacific Ocean and it is known for having two estab lished seasons: a dry season that goes from December to March, and a rainy one that goes from April to November, being April a transition month. Tempera tures in this region can go until about 32°C Instead, Caribbean region is extremely damp and has a rainy season that last almost the whole year.

The central zone of the country, for having more altitude, has fresh temperatures between 16.5°C and 27°C, and go down until 14°C in zones above 2500m, according with IMN. This land is fertile and, because of its favorable conditions, shelters the biggest amount of population.

Prevailing wind in Costa Rica comes from the north-east the whole year and does not reach a speed over 15 km/h, but in January and February, when it can go over 30km/h.



América

Western Hemisphere

Central America

Northern Hemisphere

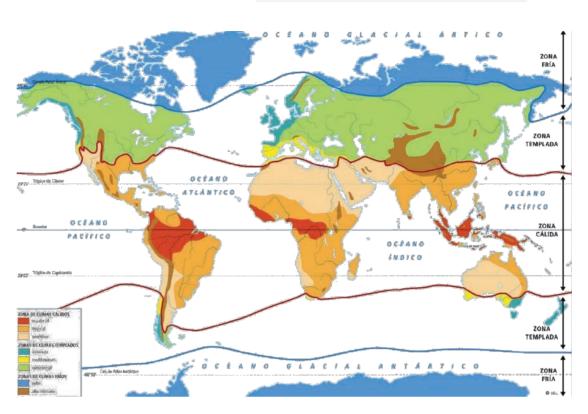
Costa Rica

Coordinates 9° 56 0 N, 84° 5 0 W Central Valley at 1300 msnm

San José City

1st Avenue 4th Street

Location Humid Tropical Climate







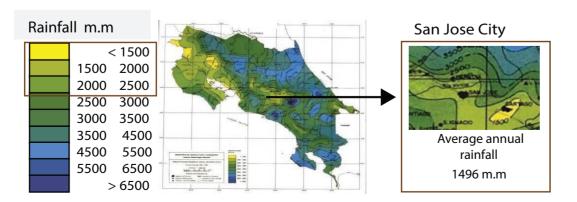
Deliverable #7 Project Drawings

Proyect: Trópika

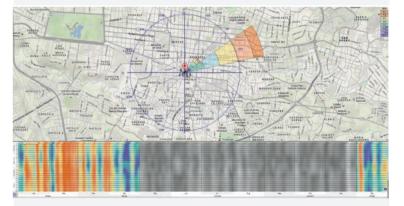
Team: Tec Team

Country: Costa Rica

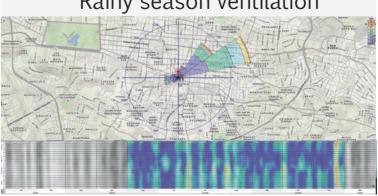
Professional seal:



Dry season ventilation



Rainy season ventilation



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Sheet title

Passive strategies

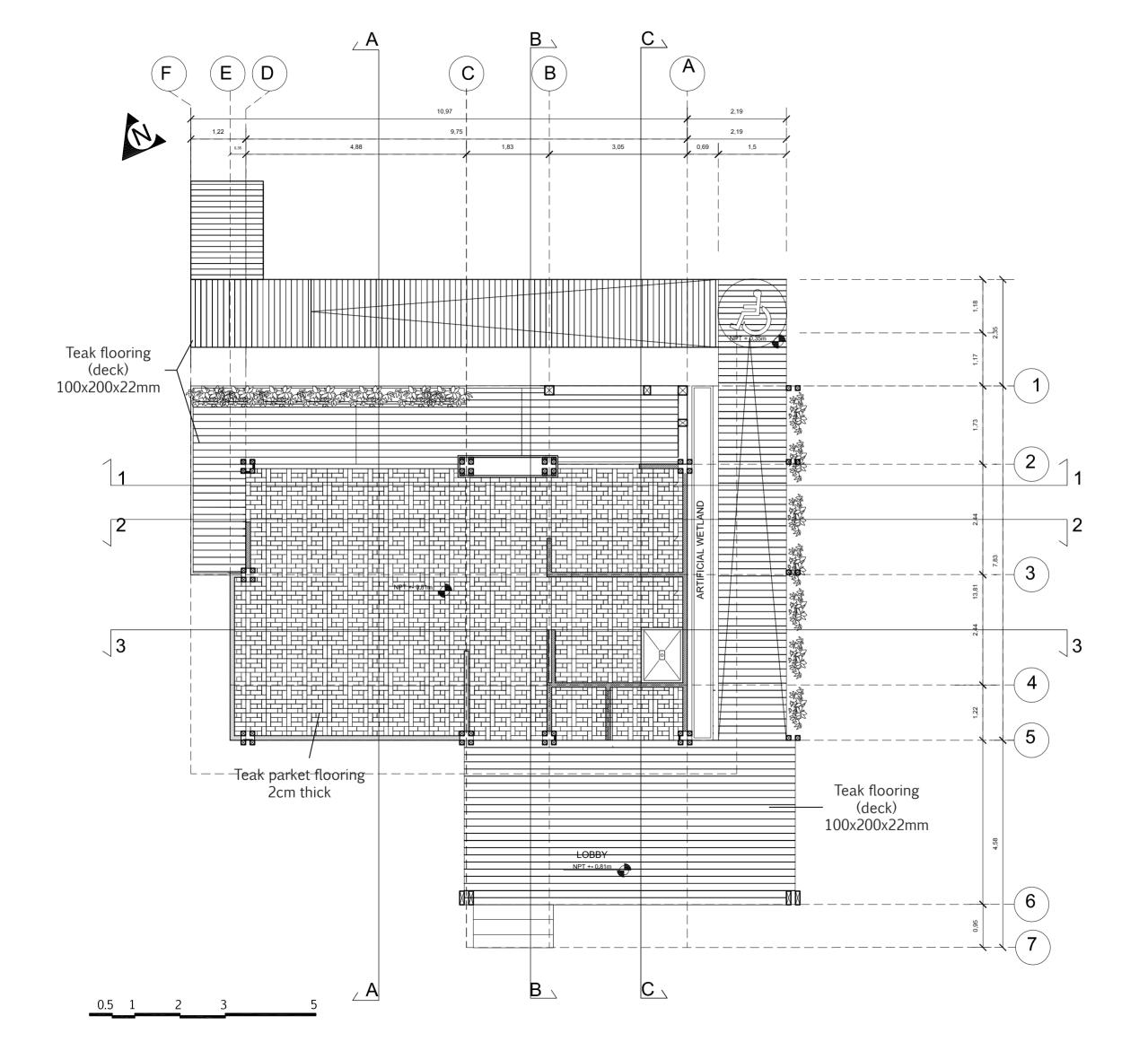
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Bioclimatic Drawings

Scale:

Date: 11/3/2014

Code: BA-012



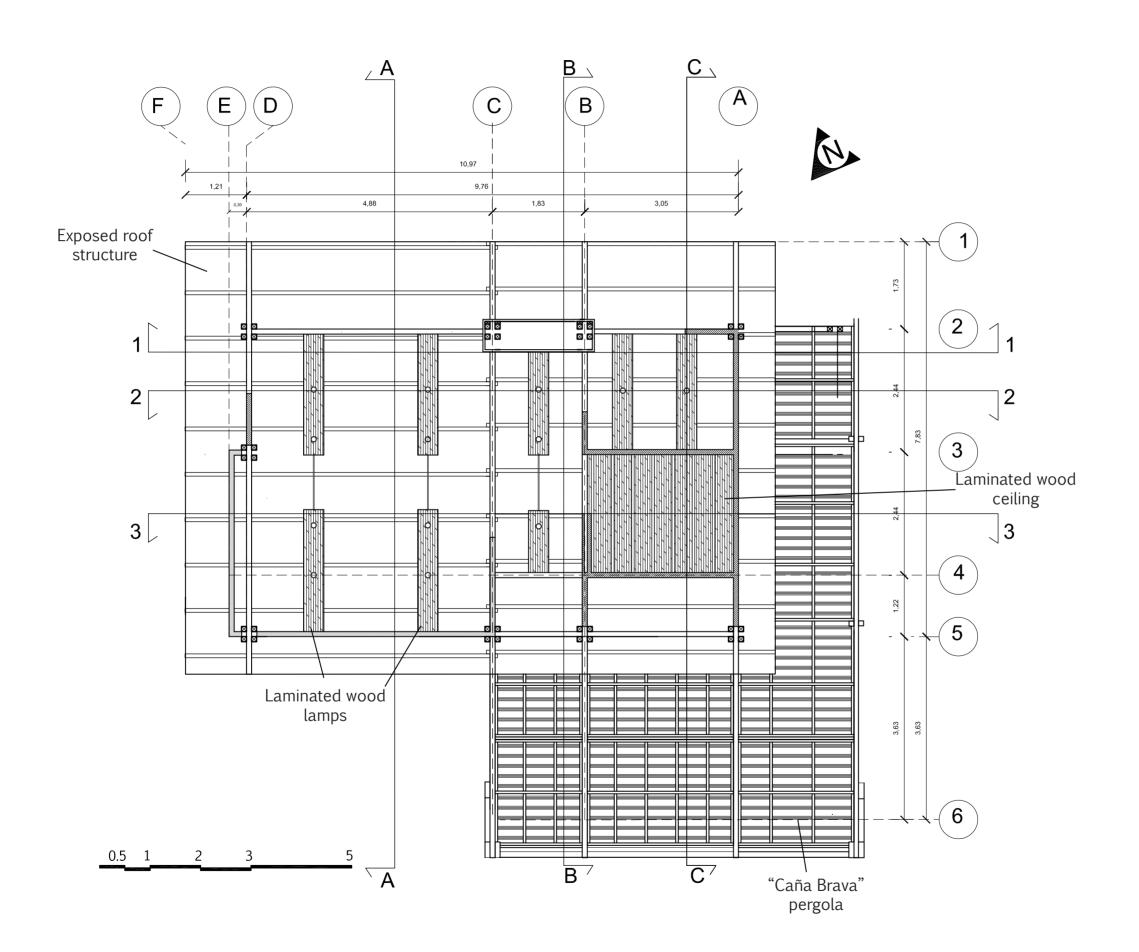




Deliverable #7 Project Drawings				
Proyect:	royect: Trópika			
Team:	eam: Tec Team			
Country:	Costa	Rica		
Professio	nal seal:			
Made by: Department of architecture				
Sheet title				
Floor				
Content: -Floor plan Scale: 1:75 Date: 11/3/2014				
Scale: 1	:/5	Date: 11/3/2014		

IN-001

Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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Sheet title

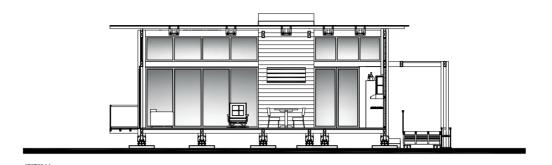
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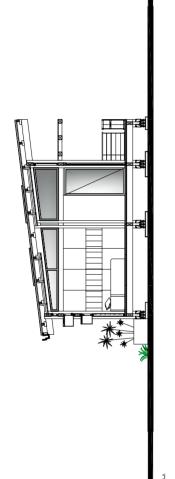
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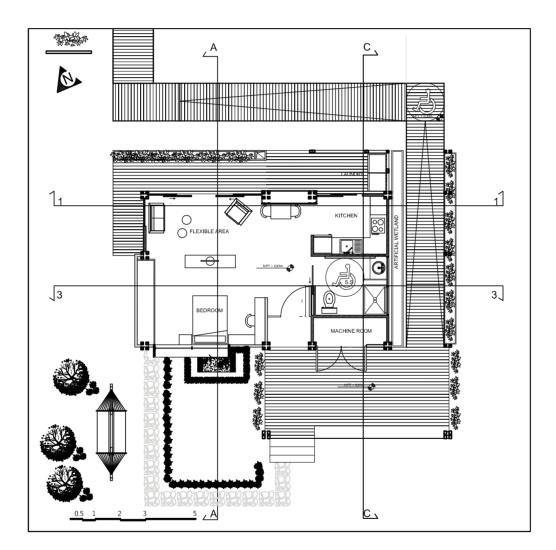
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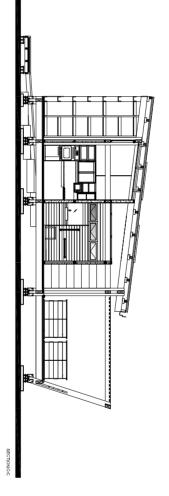
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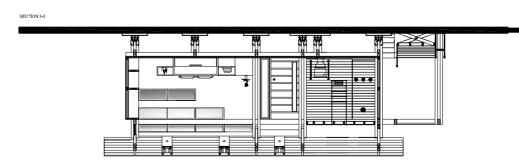
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Proyect: Trópika

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Country: Costa Rica

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Sheet title

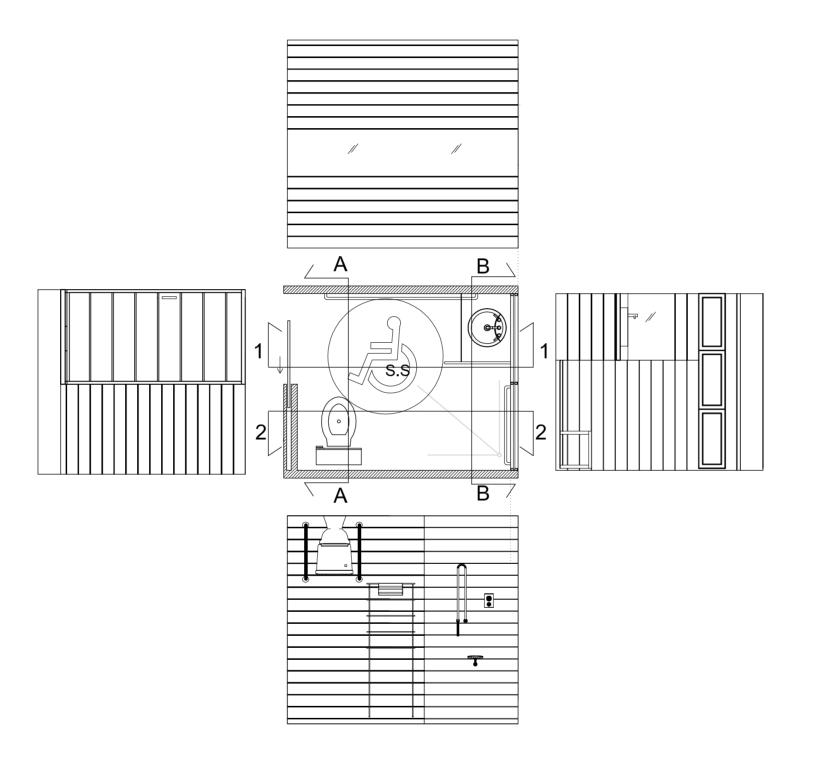
Elevations

Content: -Interior elevations

Scale: 1:150

Date: 11/3/2014

Code: IN-201







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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Sheet title

Elevations

Content: -Bathroom interior elevations

Scale: 1:50

Date: 11/3/2014

Code:





	Deliverable #7 Project Drawings
Proyect:	Trópika
Team:	Tec Team
Country:	Costa Rica
Professio	nal seal:

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	design

Sheet title

Furnishings

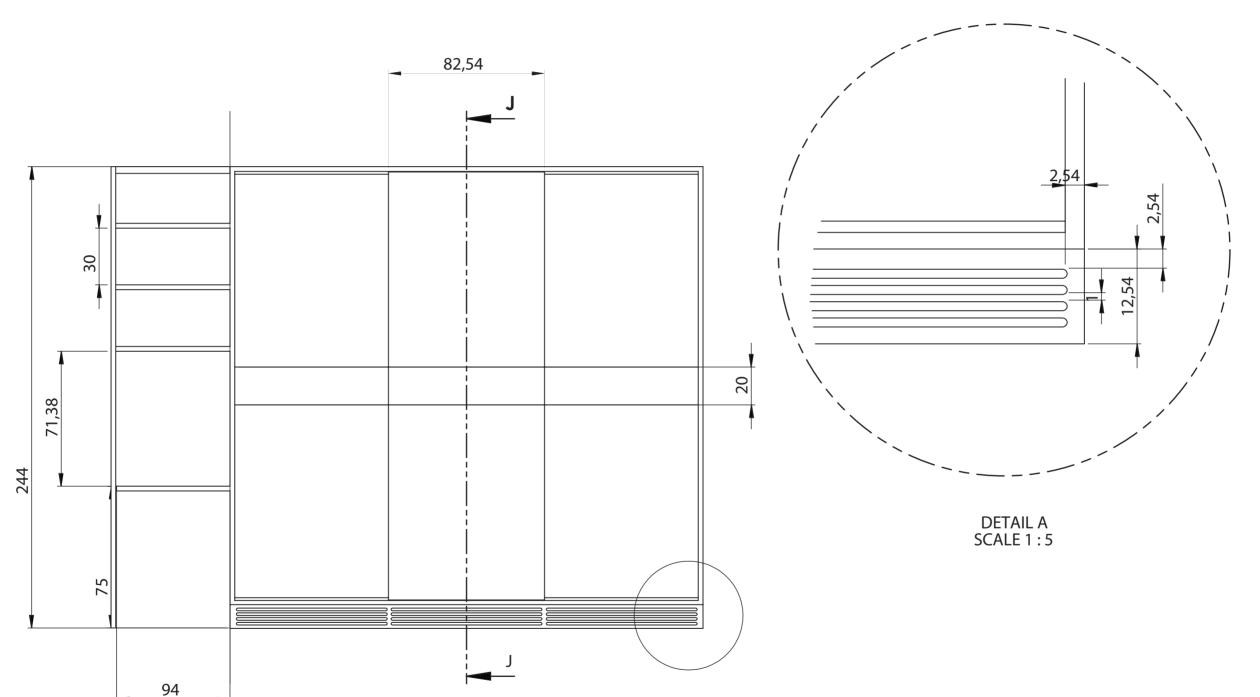
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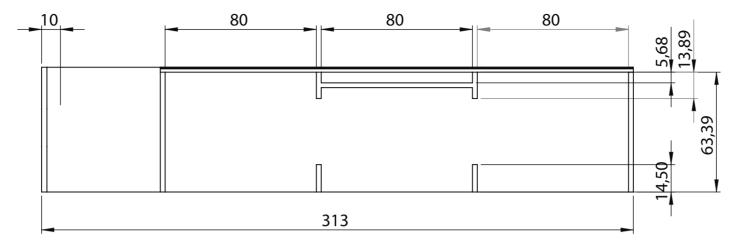
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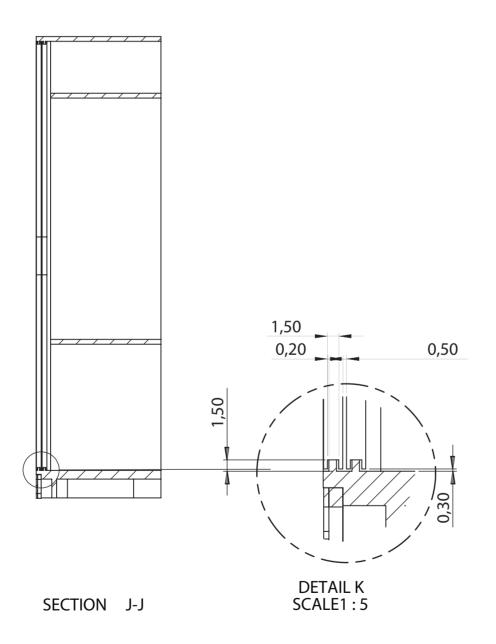
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Front view



Bottom view







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Country: Costa Rica

Professional seal:

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Sheet title

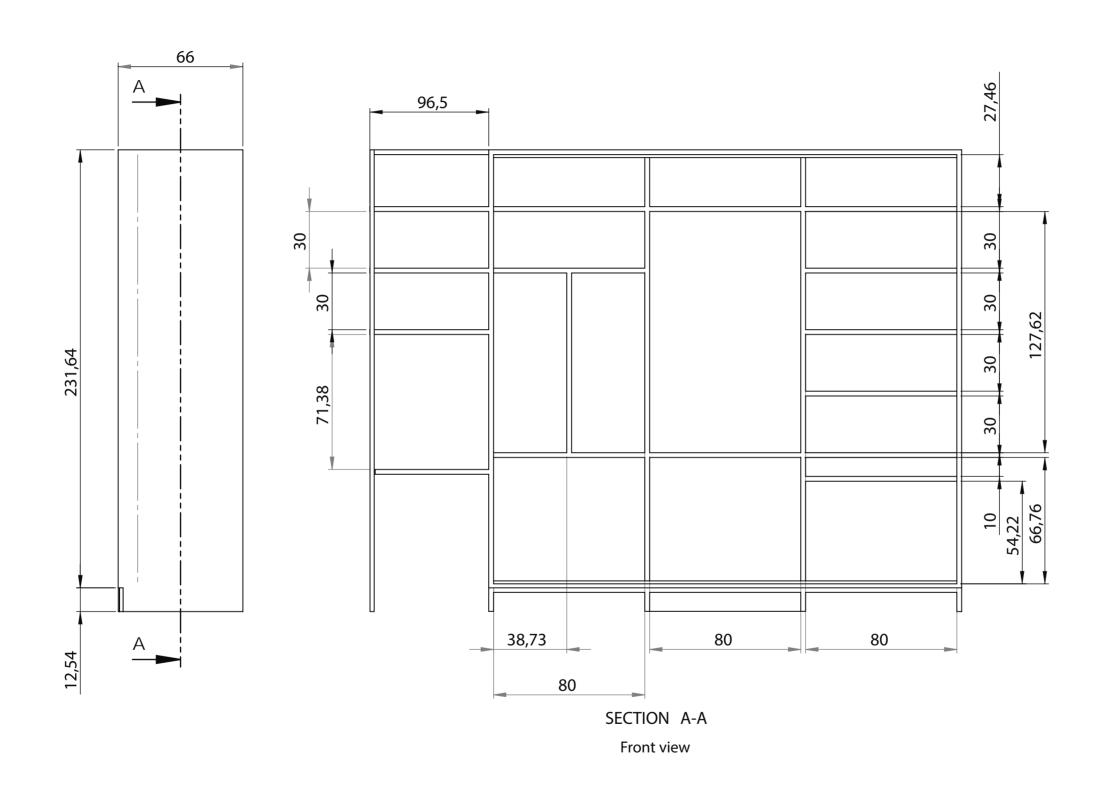
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Content: Closet Elevations

Scale: 1:20

Date: 11/3/2014

Code:







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Sheet title

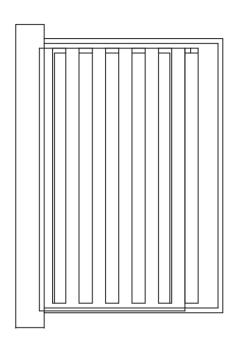
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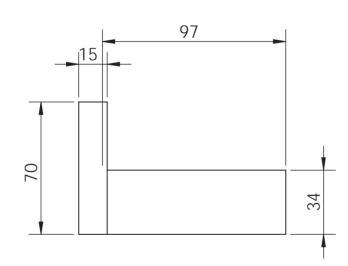
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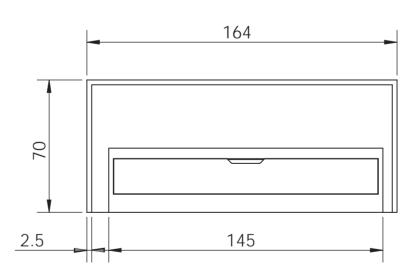
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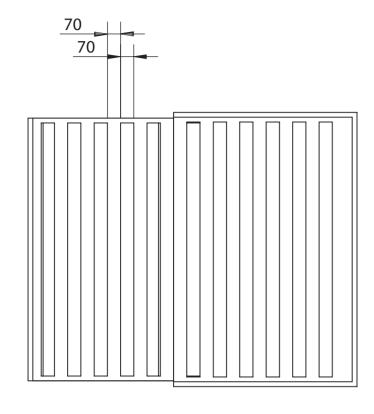
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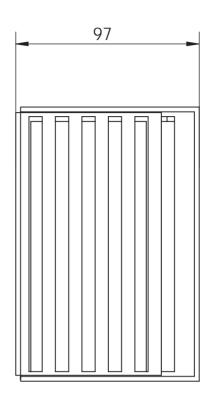
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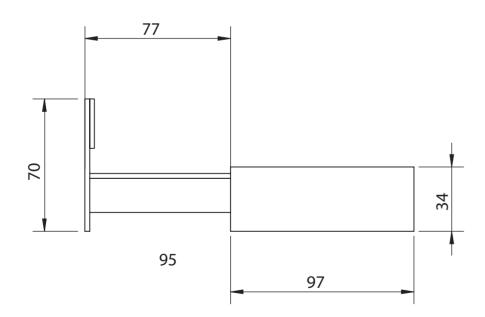
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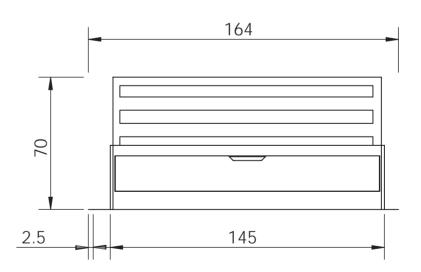
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Proyect: Trópika

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Furnishings

Content: Bed Elevations

Scale: 1:20

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Code:







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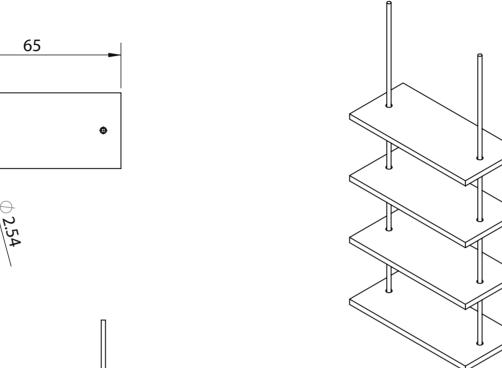
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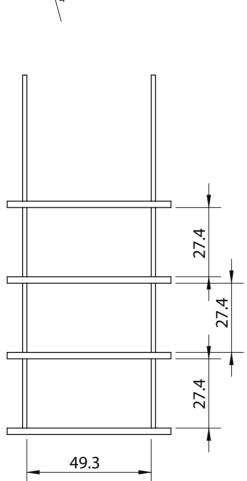
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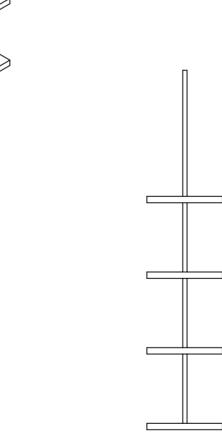
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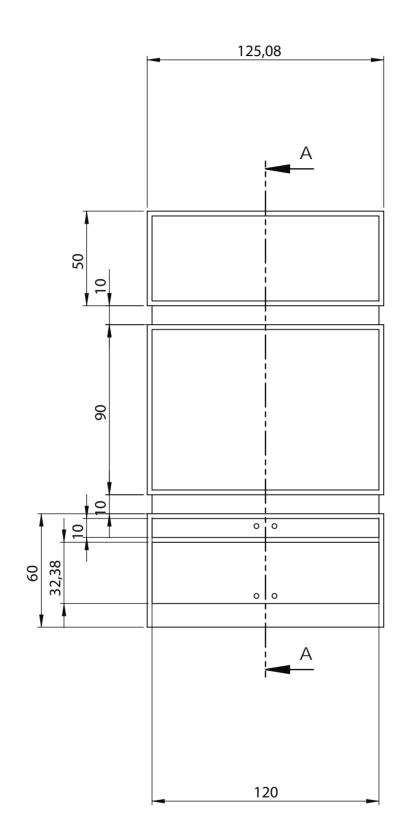
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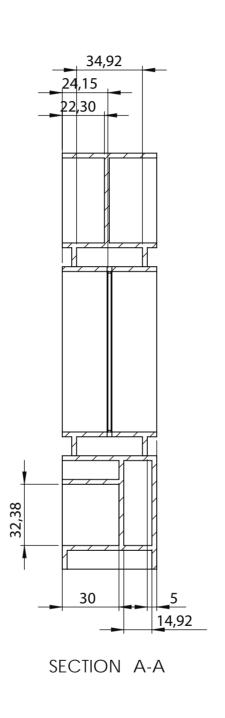


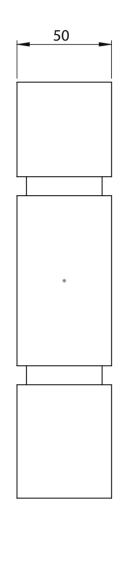


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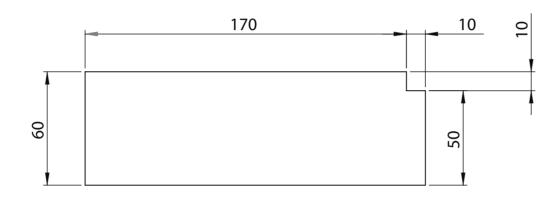
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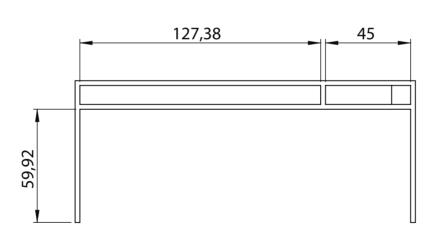
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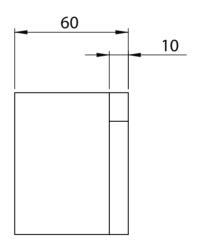
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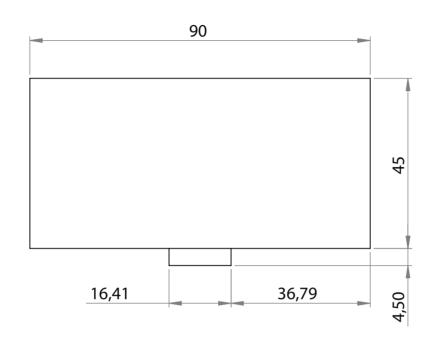
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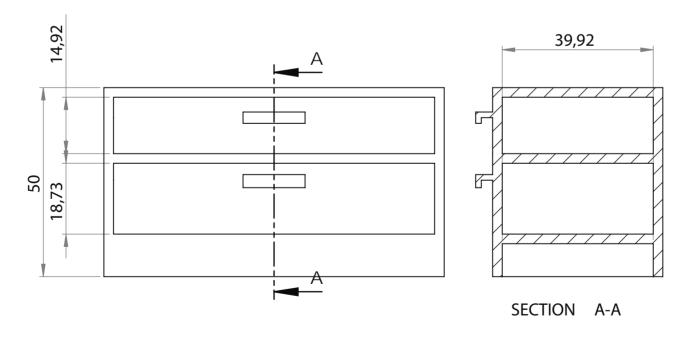
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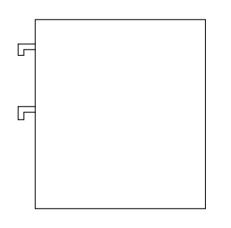
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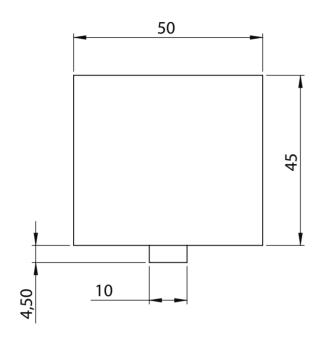
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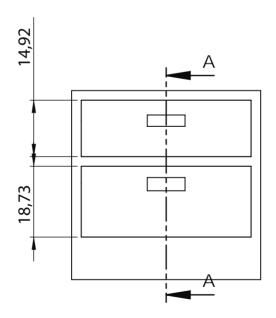
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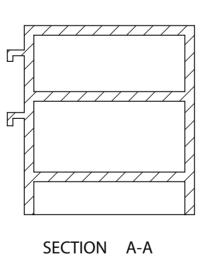
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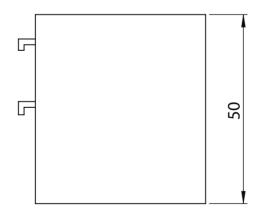
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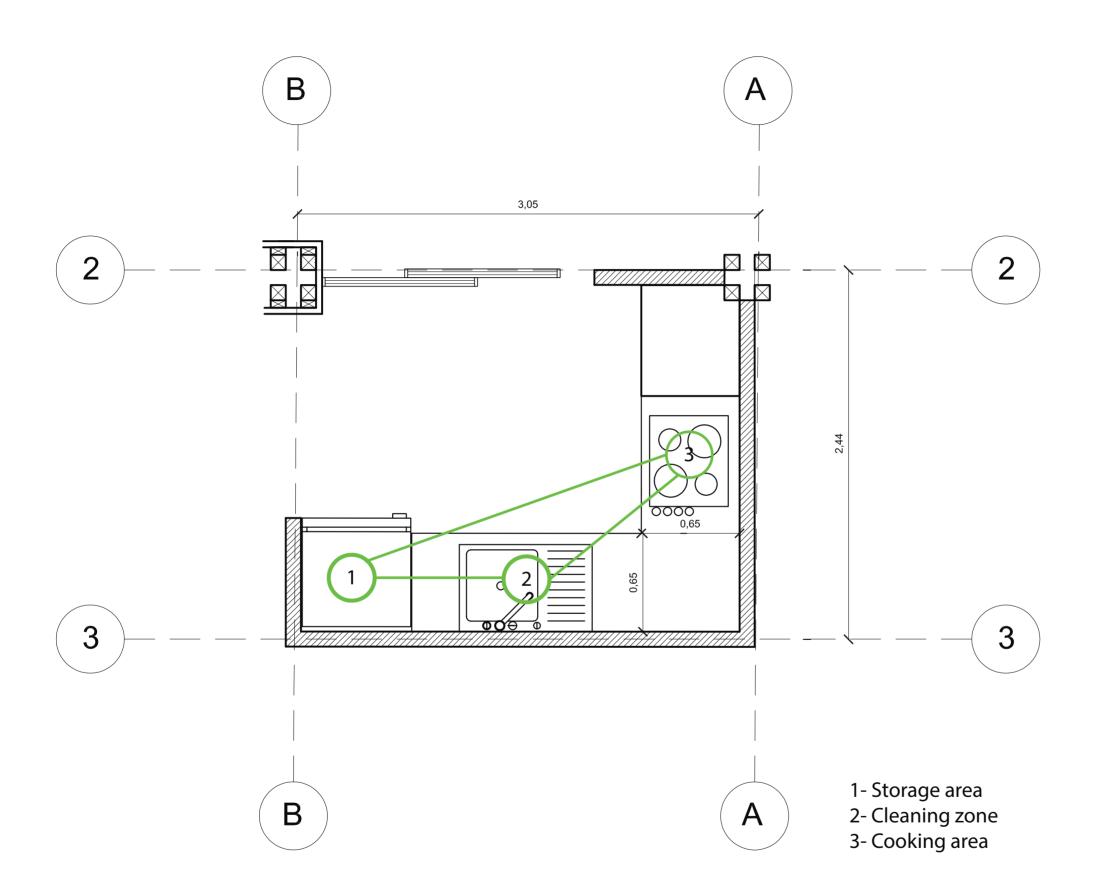
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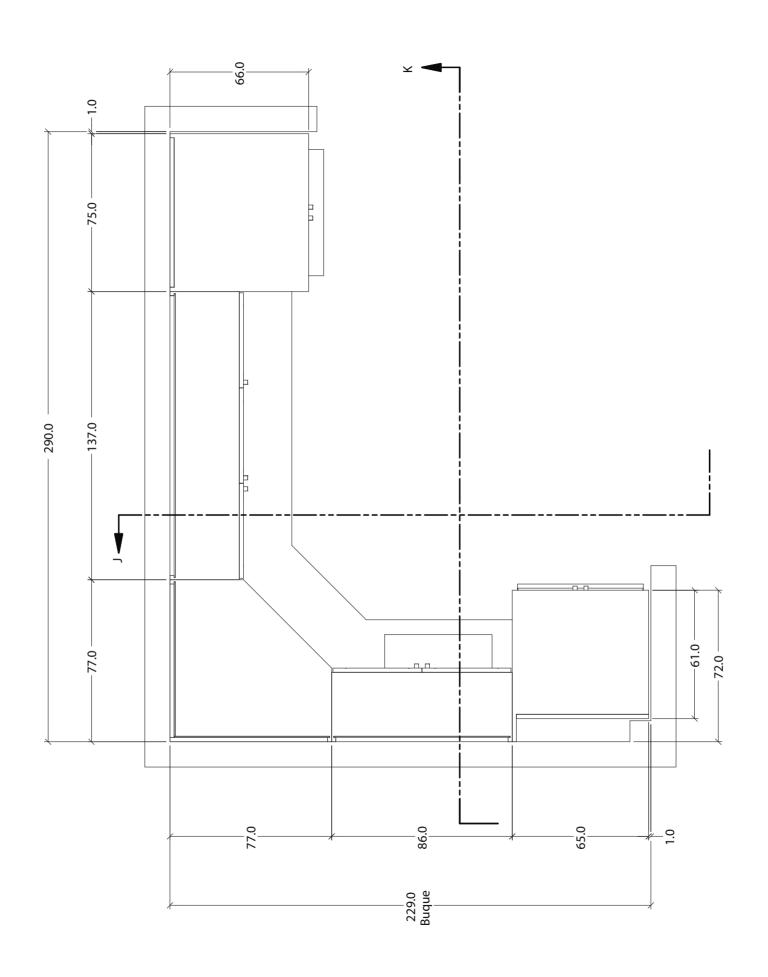


Deliverable #7 Project Drawings
Proyect: Trópika
Team: Tec Team
Country: Costa Rica
Professional seal:
Made by: Department of
design
Sheet title
Kitchen plan
Kitchen plan
Content:
Kitchen plan

Scale: 1:18

Date: 11/3/2014

Code:







Deliverable #/
Project Drawings

Team: Tec Team

Country: Costa Rica

Professional seal:

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Sheet title

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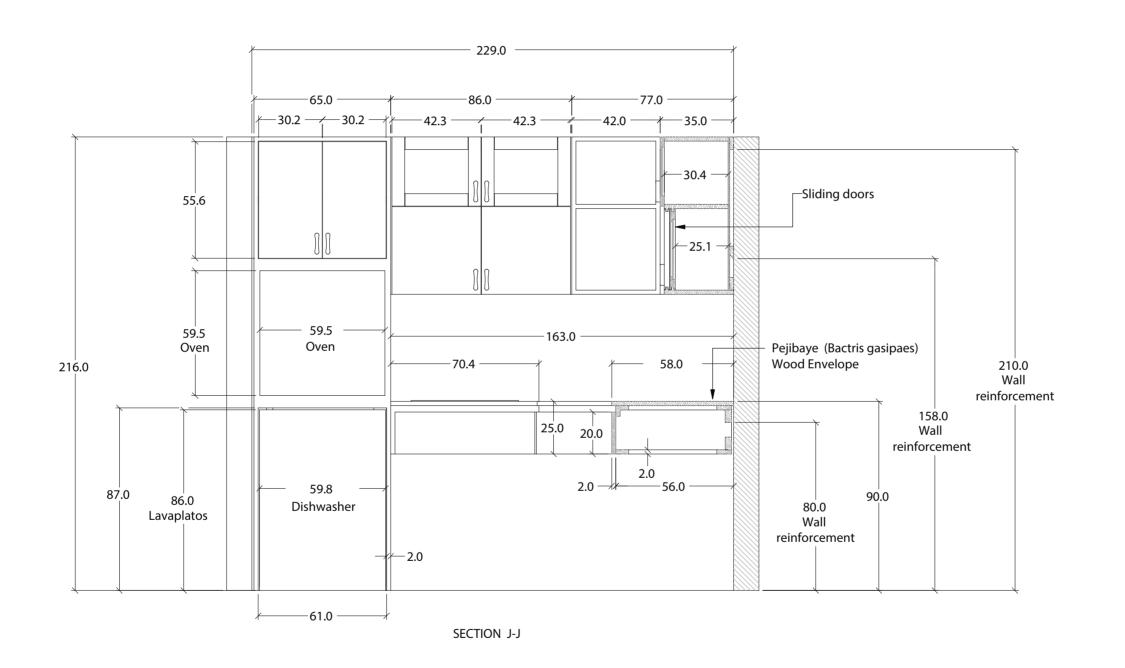
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Kitchen plan

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Date: 11/3/2014

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Deliverable #7
Project Drawings

Team: Tec Team

Country: Costa Rica

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Made by: Department of design

Sheet title

Kitchen Elevations

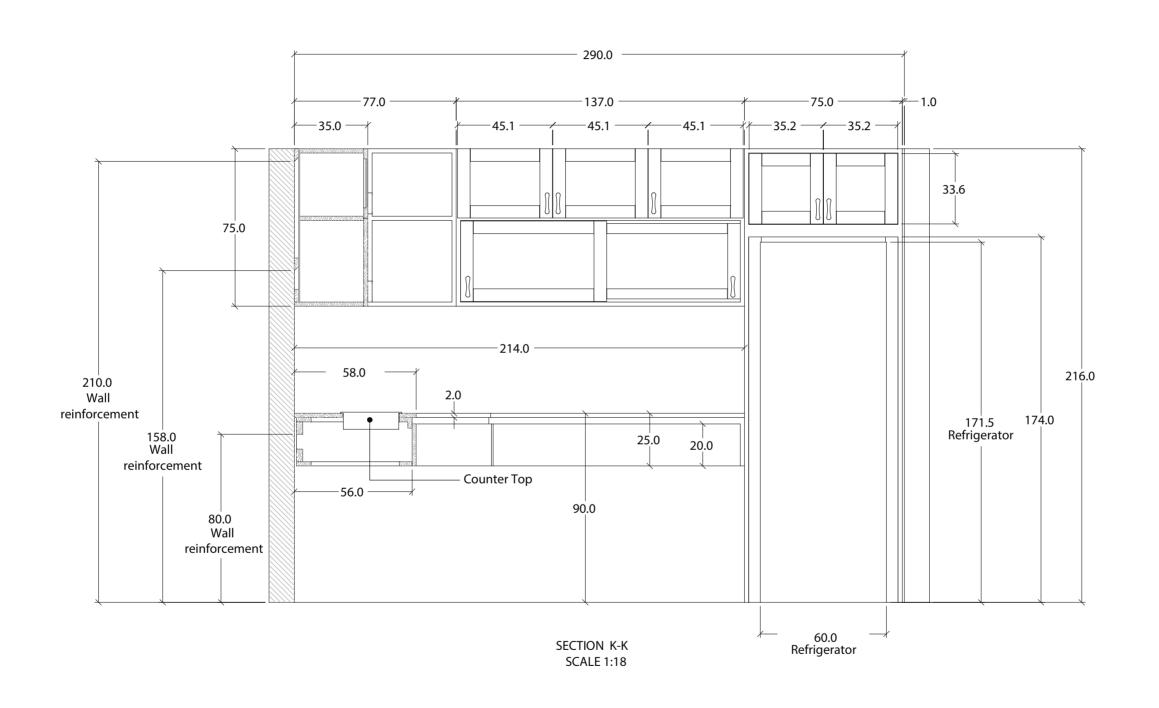
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Kitchen Elevations

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Deliverable #7
Project Drawings

Team: Tec Team

Country: Costa Rica

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Sheet title

Kitchen Elevations

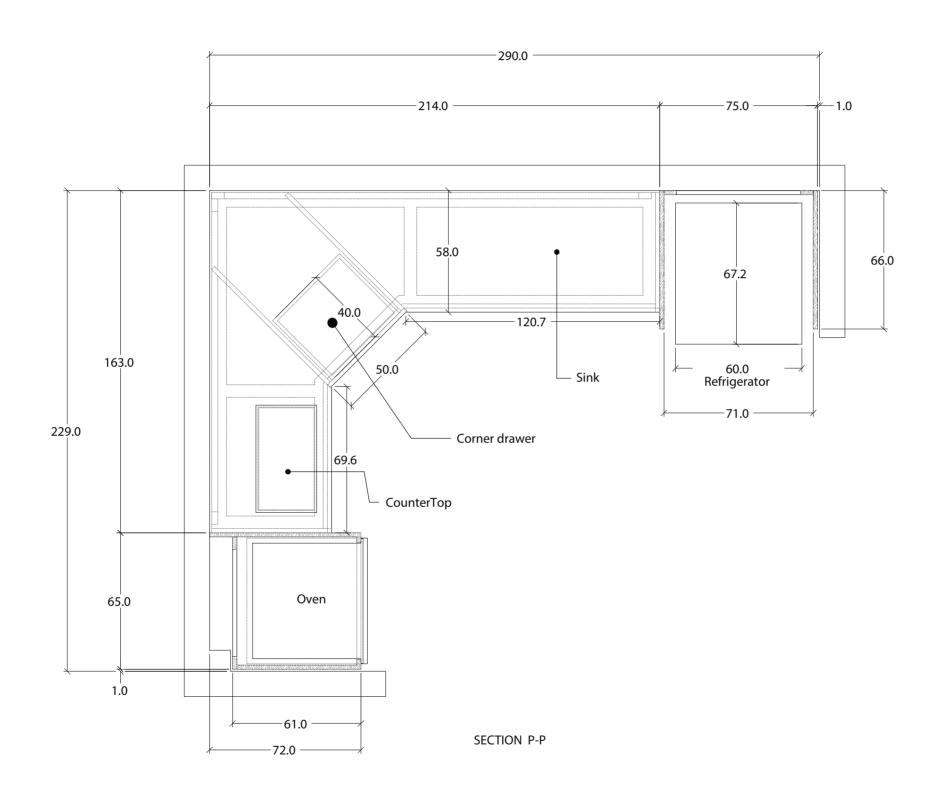
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Kitchen Elevations

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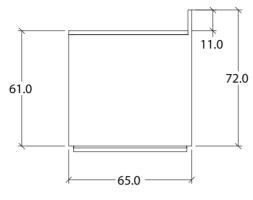
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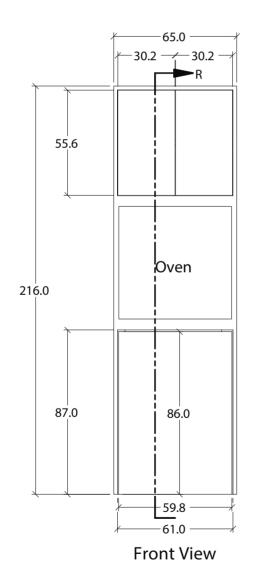
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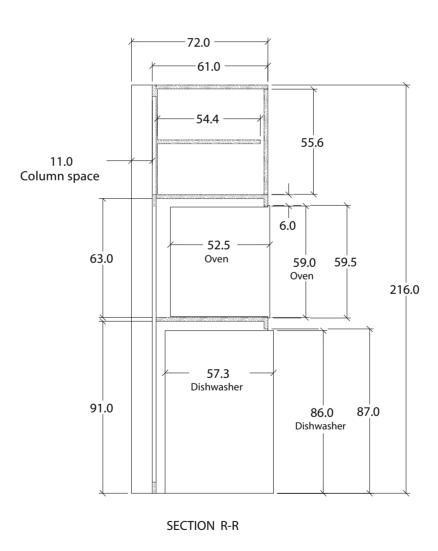
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Top view









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Country: Costa Rica

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Sheet title

Kitchen Elevations

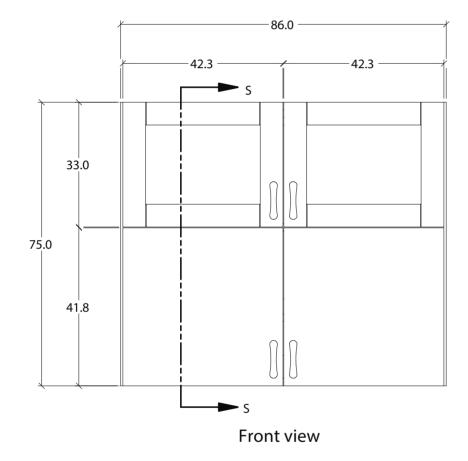
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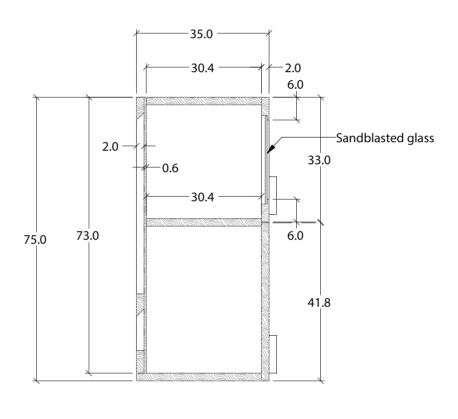
Kitchen Elevations

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Date: 11/3/2014

Code:





SECTION S-S





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

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Sheet title

Kitchen Elevations

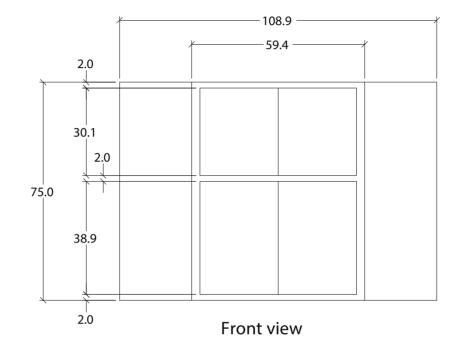
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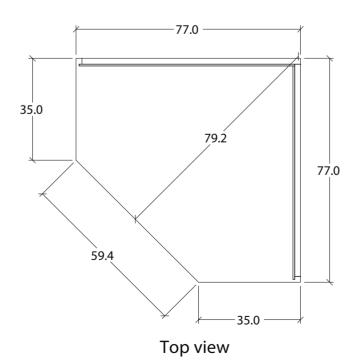
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Team: Tec Team

Country: Costa Rica

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Kitchen Elevations

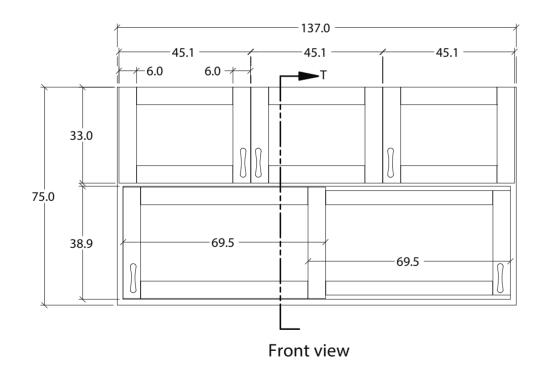
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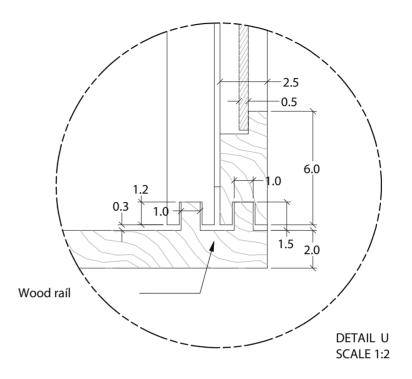
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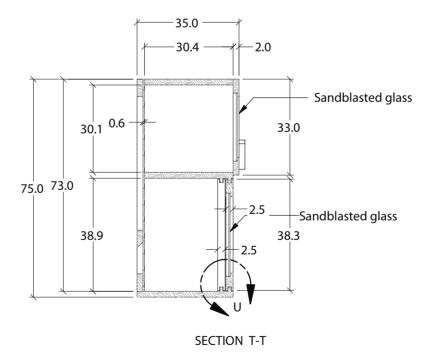
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Country: Costa Rica

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Kitchen Elevations

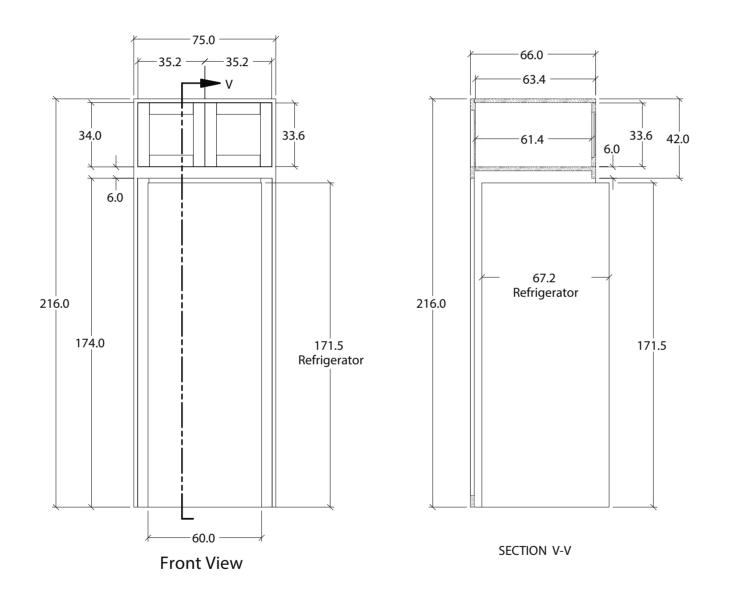
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Kitchen Elevations

Scale: 1:13

Date: 11/3/2014

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Proyect: Trópika

Team: Tec Team

Country: Costa Rica

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Sheet title

Kitchen Elevations

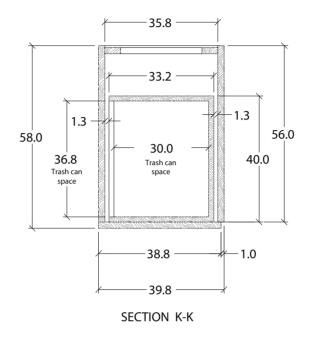
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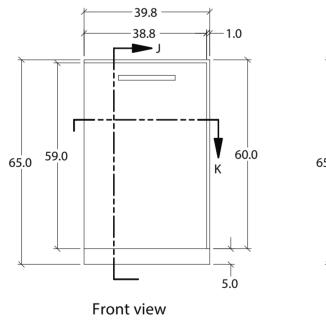
Kitchen Elevations

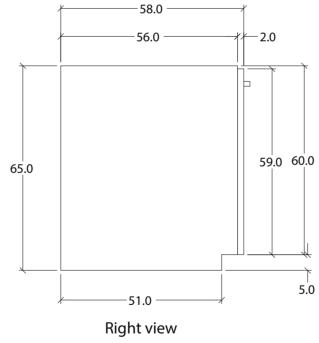
Scale: 1:20

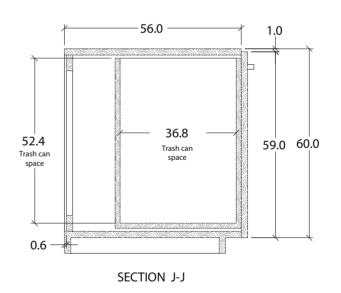
Date: 11/3/2014

Code:













Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of design

Sheet title

Kitchen Elevations

Content:

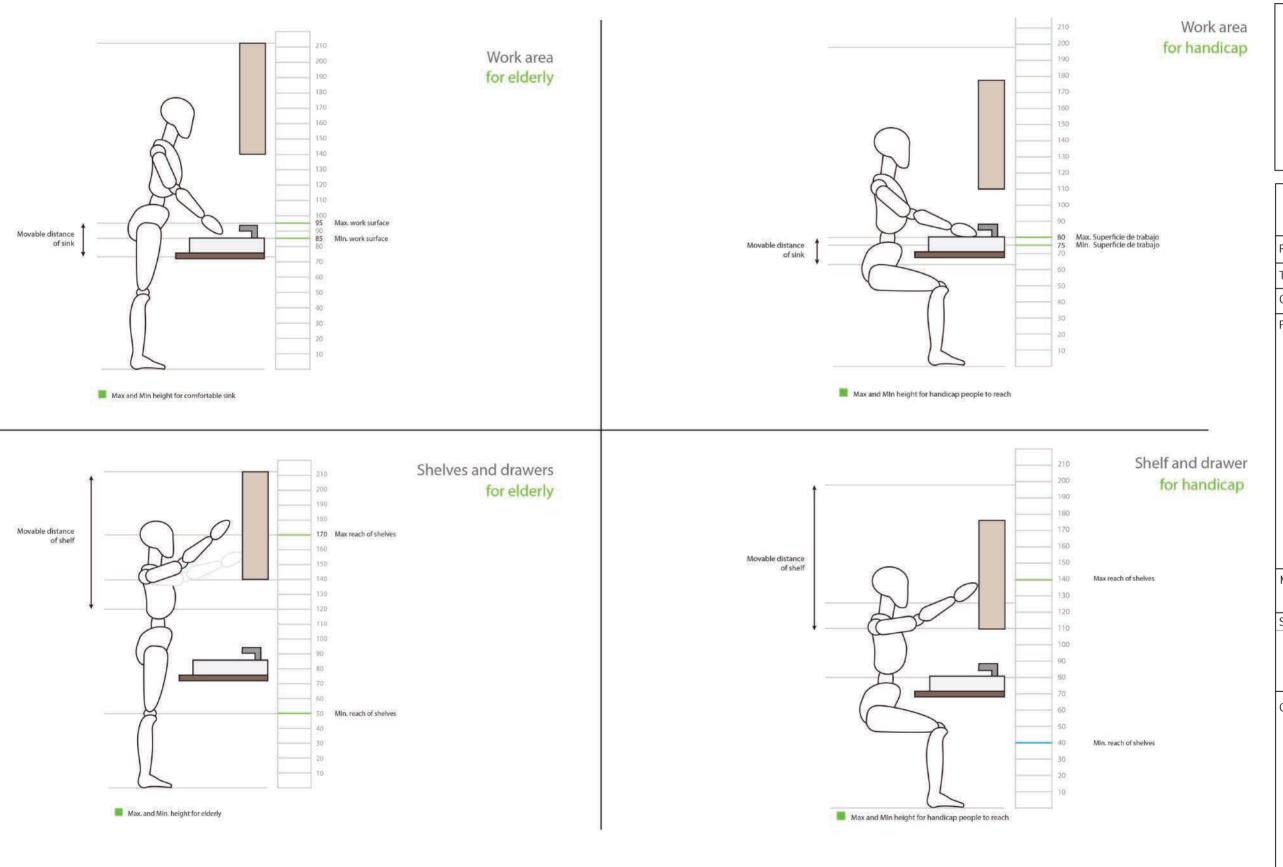
Kitchen Elevations

Scale: 1:12

Date: 11/3/2014

Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of design

Sheet title

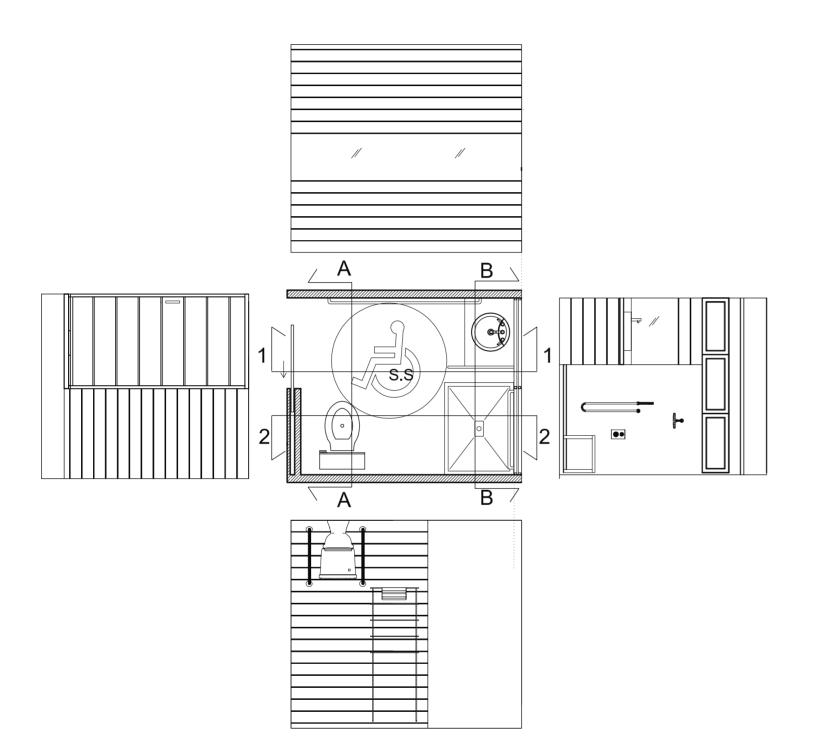
Bathroom elevations

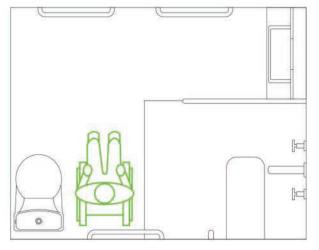
Content: -Details

Scale: 1:10

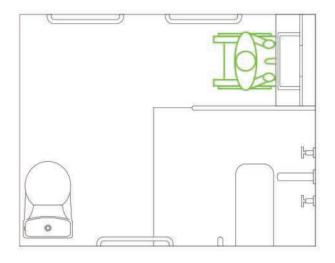
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Code: IN-511

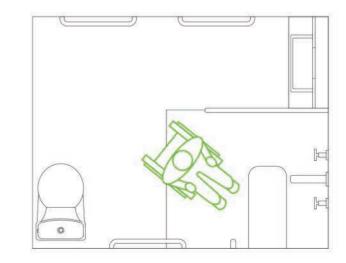




Use of the toilet for wheelchair



Acces to the sink in wheelchair



Acces to the shower in wheelchair





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of design

Sheet title

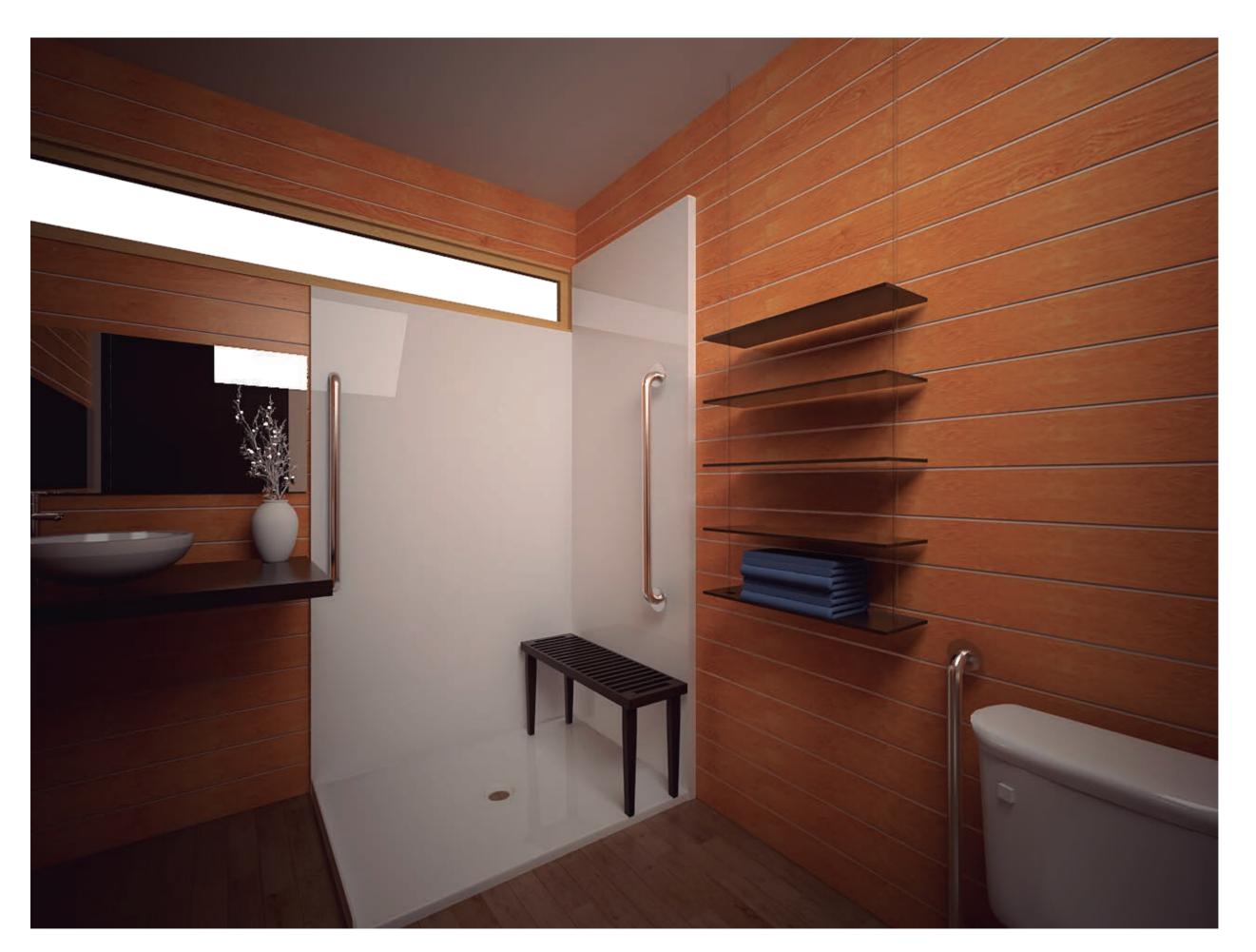
Bathroom plan

Content: -Bathroom plan and elevations

Scale: 1:10

Date: 11/3/2014

Code: IN-501







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of design

Sheet title

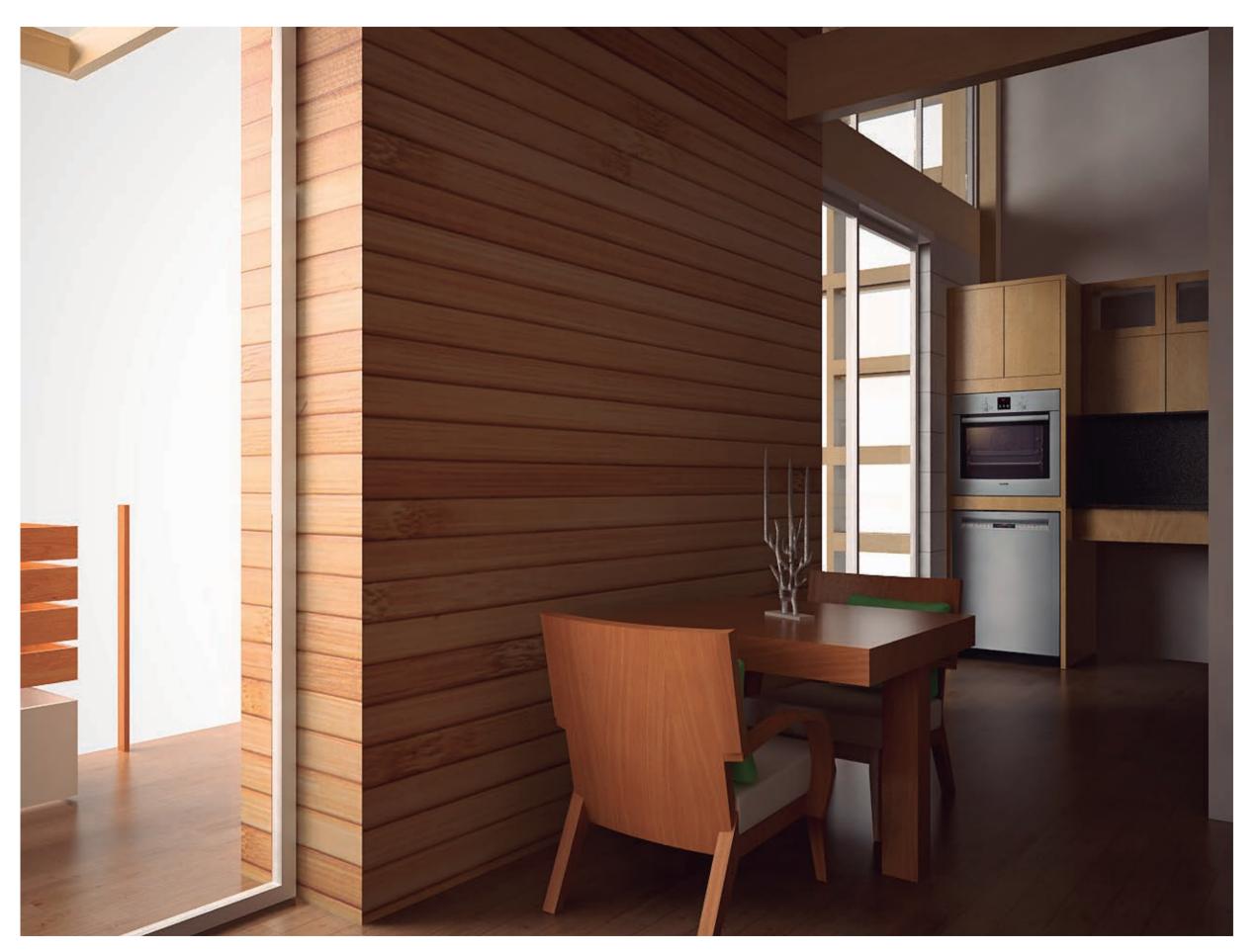
Interior renderings

Content: -Bathroom

Scale:

Date: 11/3/2014

Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of design

Sheet titl

Interior renderings

Content: -Flexible space.

Scale:

Date: 11/3/2014

Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of design

Sheet titl

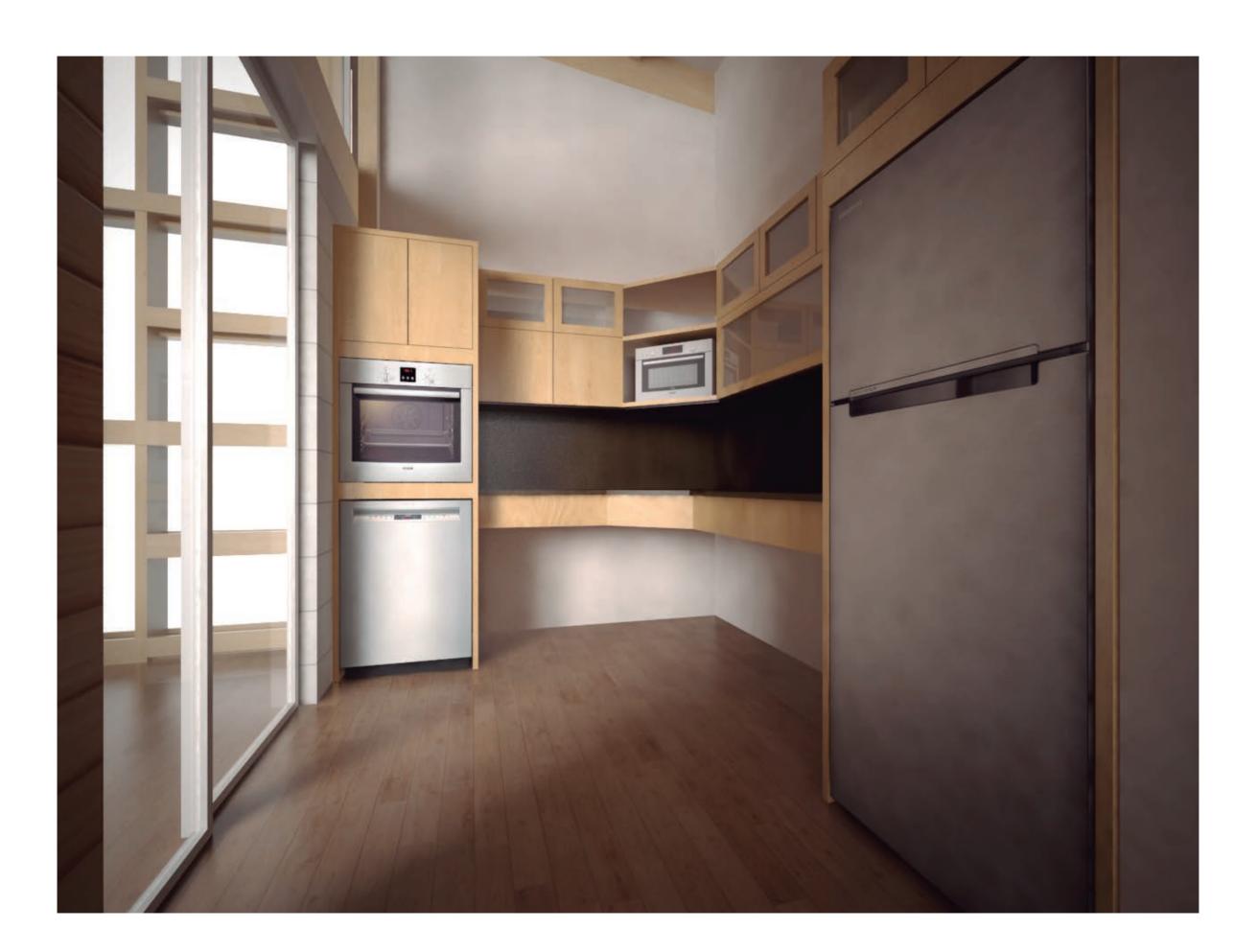
Interior renderings

Content: -Flexible space.

Scale:

Date: 11/3/2014

Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of design

Sheet titl

Interior renderings

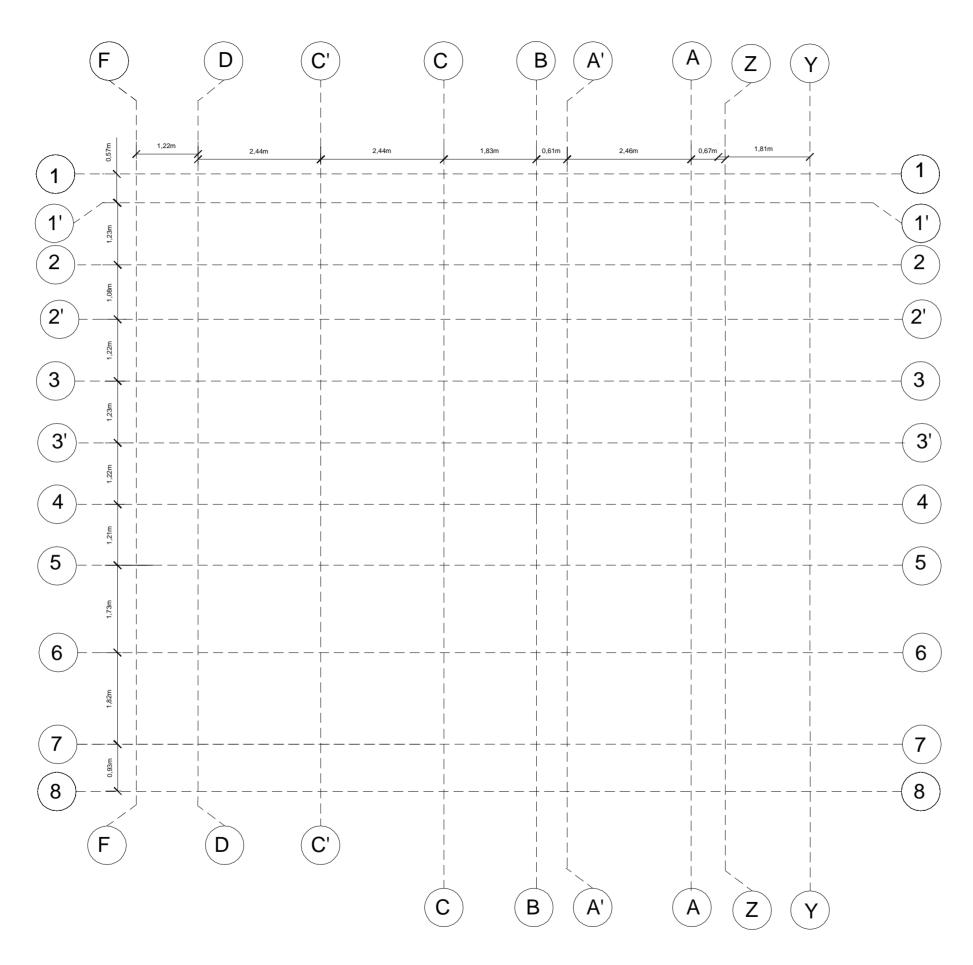
Content: -Kitchen

Scale:

Date: 11/3/2014

Code:









Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



DIRECCION TECNICA:

NOMBRE: ING. ERICH NEUROHR I

N° REG. IC 5721

Made by: Department of construction

Sheet title

Foundation Plan

Content:

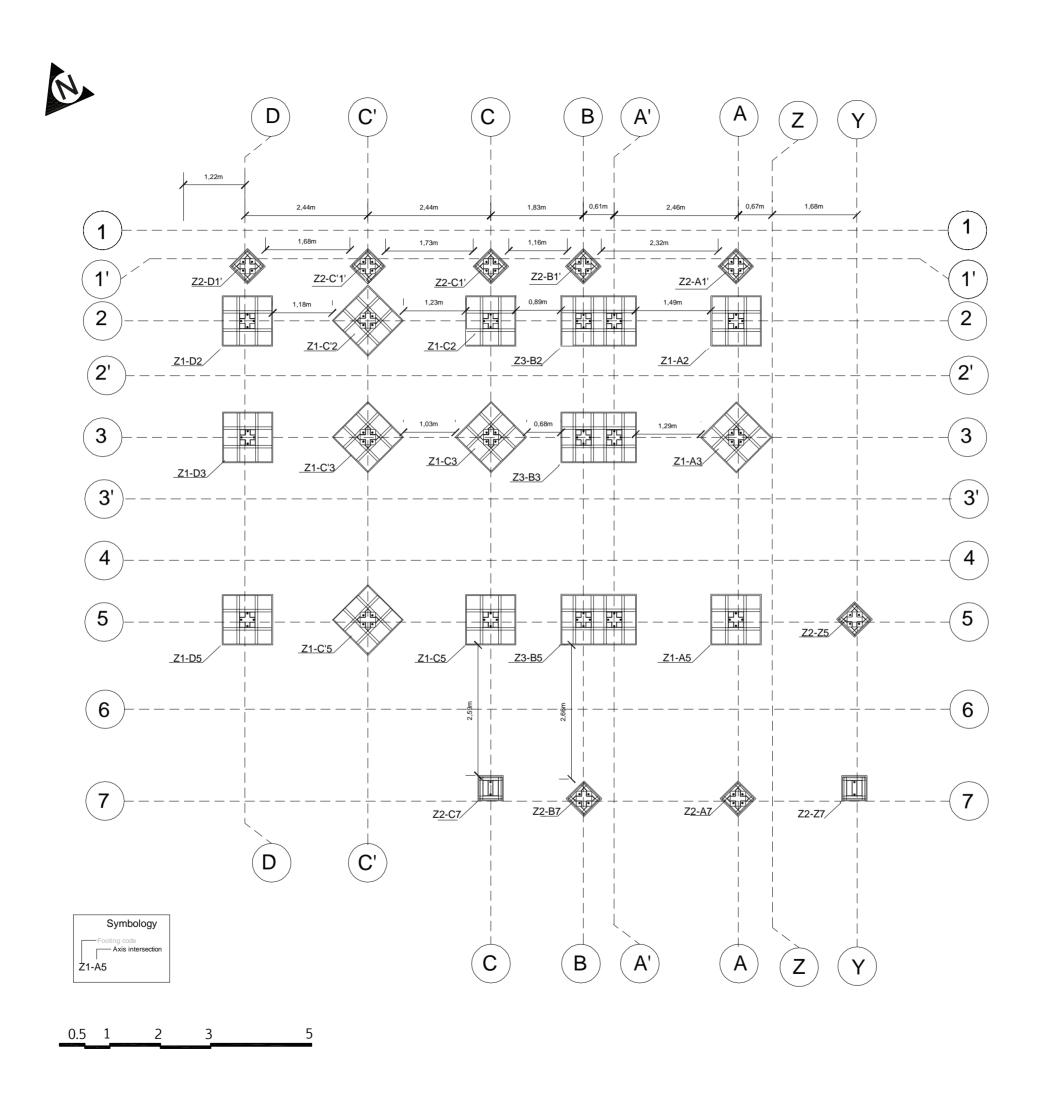
Dimensions plan

Scale: 1:75

Date:11/03/2014

Code: ST-001

0.5 1 2 3 5







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Made by: Department of construction

Sheet title

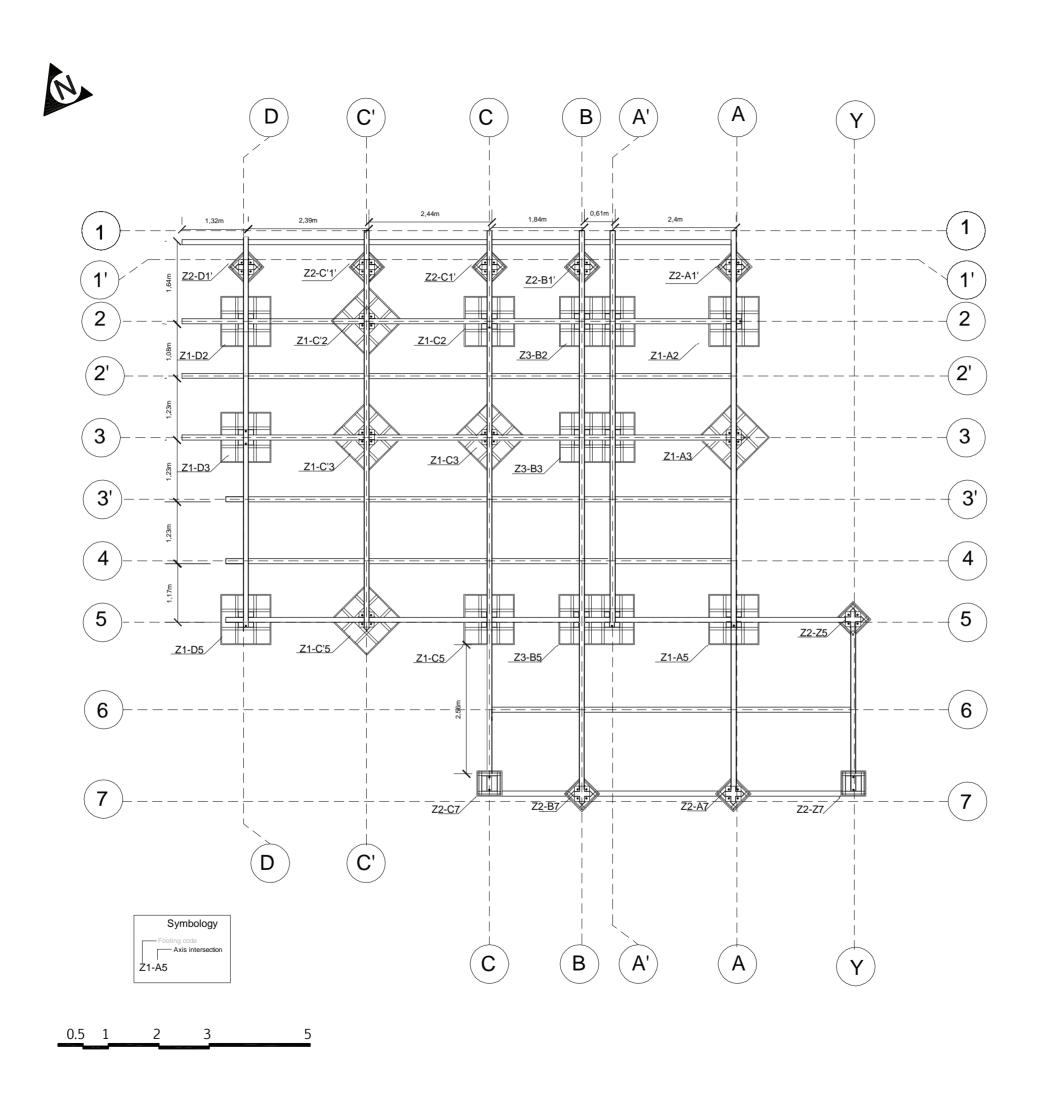
Foundation Plan

Content:

Footing distribution

Scale: 1:75

Date:11/03/2014







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

INGENIER CONSUL TEL.(506) 2257

PROFESIONAL RESPONSABLE: DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

Made by: Department of construction

Sheet title

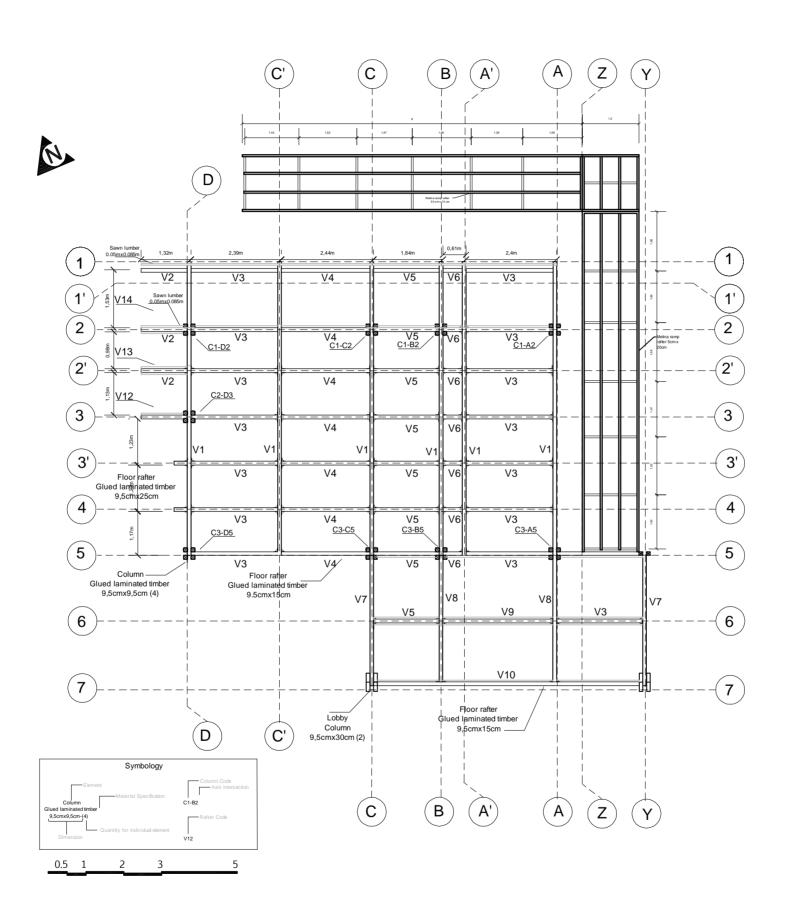
Foundation Plan

Content:

Footing distribution and floor rafters

Scale: 1:75

Date:11/03/2014







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

INGENIEROS ESTRUCTURALI CONSULTORES ASOCIADO INTERNACIONAL E-mai: rão 6 incainternacional.com 2257 7087

DIRECCION TECNICA:
NOMBRE: ING. ERICH NEUROHR B.
N° REG. IC 5721

Made by: Department of constructionn

Sheet title

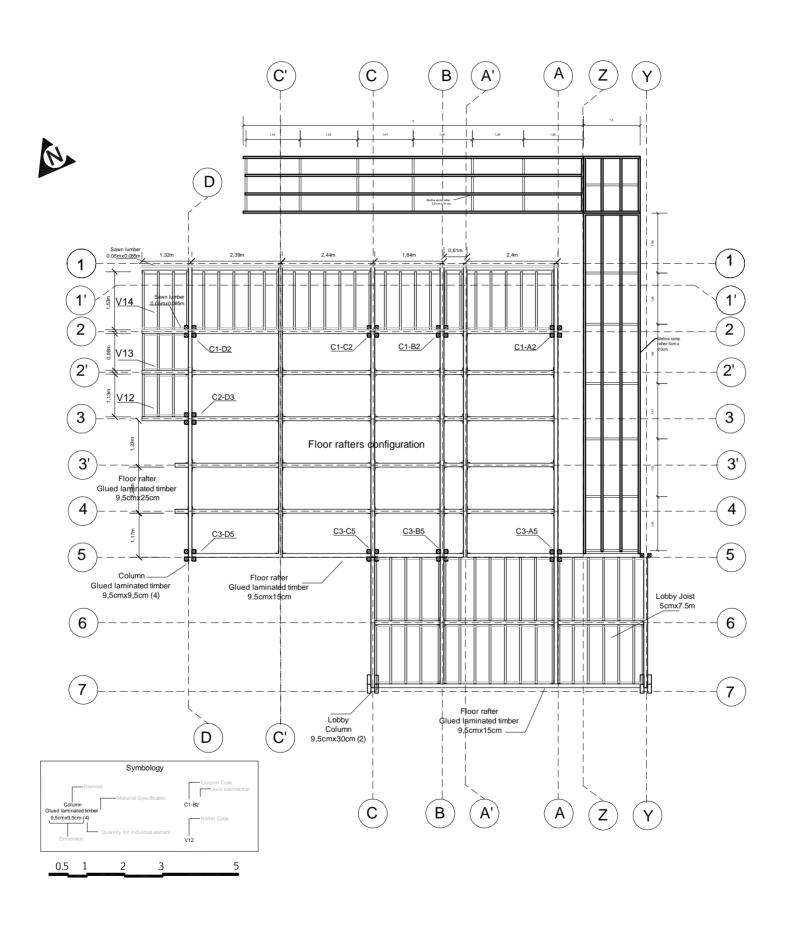
Structural Floor Plan

Content:

Principal and transversal floor rafters

Scale: 1:100

Date:11/03/2014







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

Made by: Department of constructionn

Sheet title

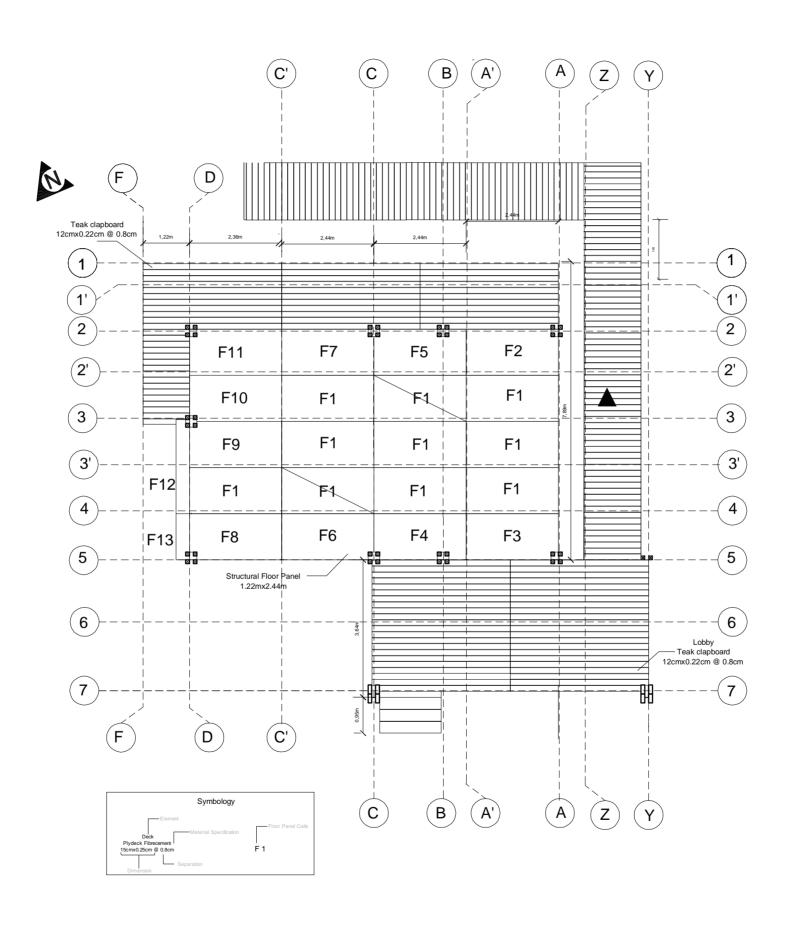
Foundation Plan

Content:

Principal and transversal rafters and joist for teak clapboard

Scale: 1:100

Date: 6/02/2014







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



ROFESIONAL RESPONSABLE: IRECCION TECNICA: IOMBRE: ING. ERICH NEUROHR B

Made by: Department of construction

Sheet title

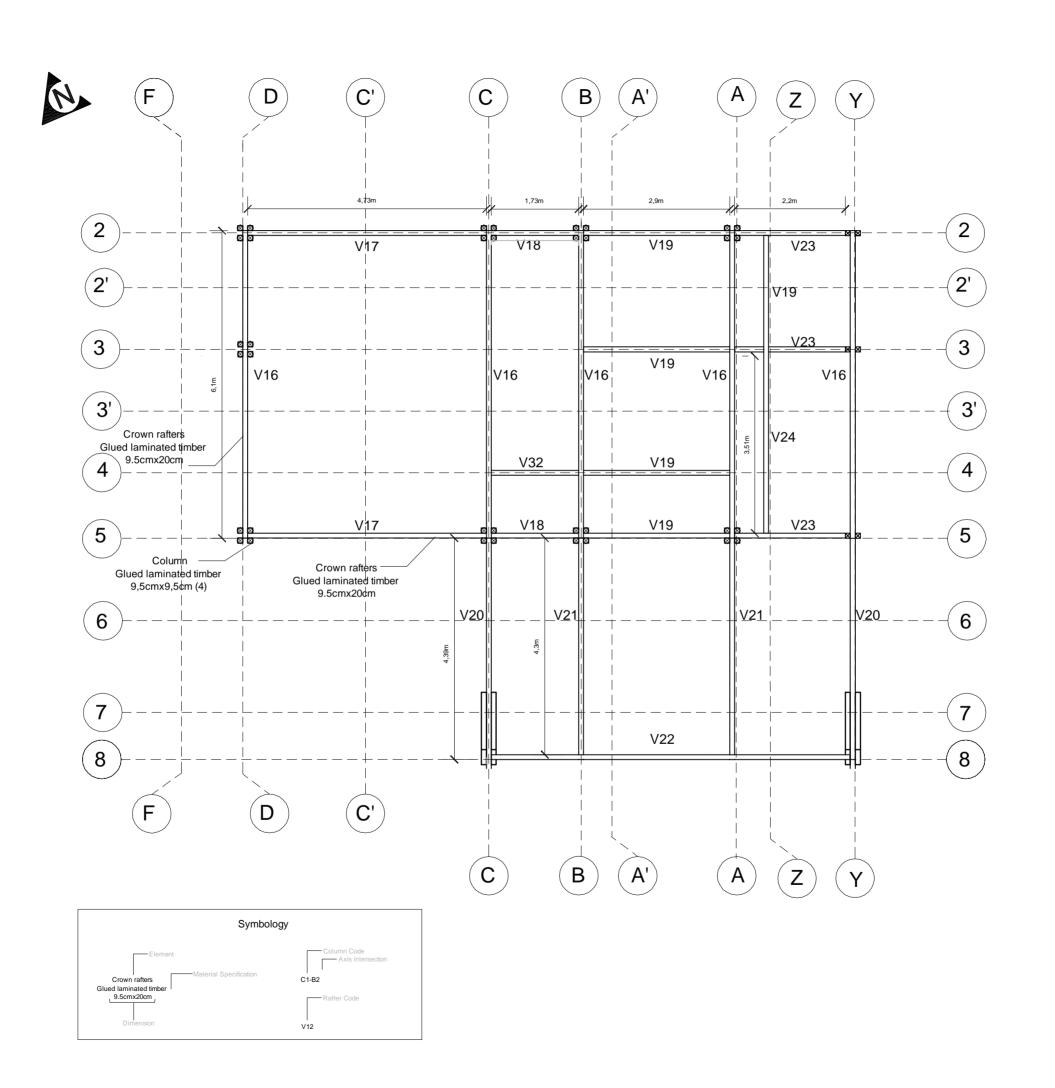
Structural Floor Plan

Content:

Structural Floor panel distribution

Scale: 1:100

Date:11/03/2014







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

INGENIEROS ESTRUCTURALES CONSULTORES ASOCIADOS ENTERNACIONAL entale Pride General Consultados Para (Pride General Consultados

DIRECCION TECNICA:

NOMBRE: ING. ERICH NEUROHR E

N° REG. IC 5721

Made by: Department of construction

Sheet title

Structural Roof Plan

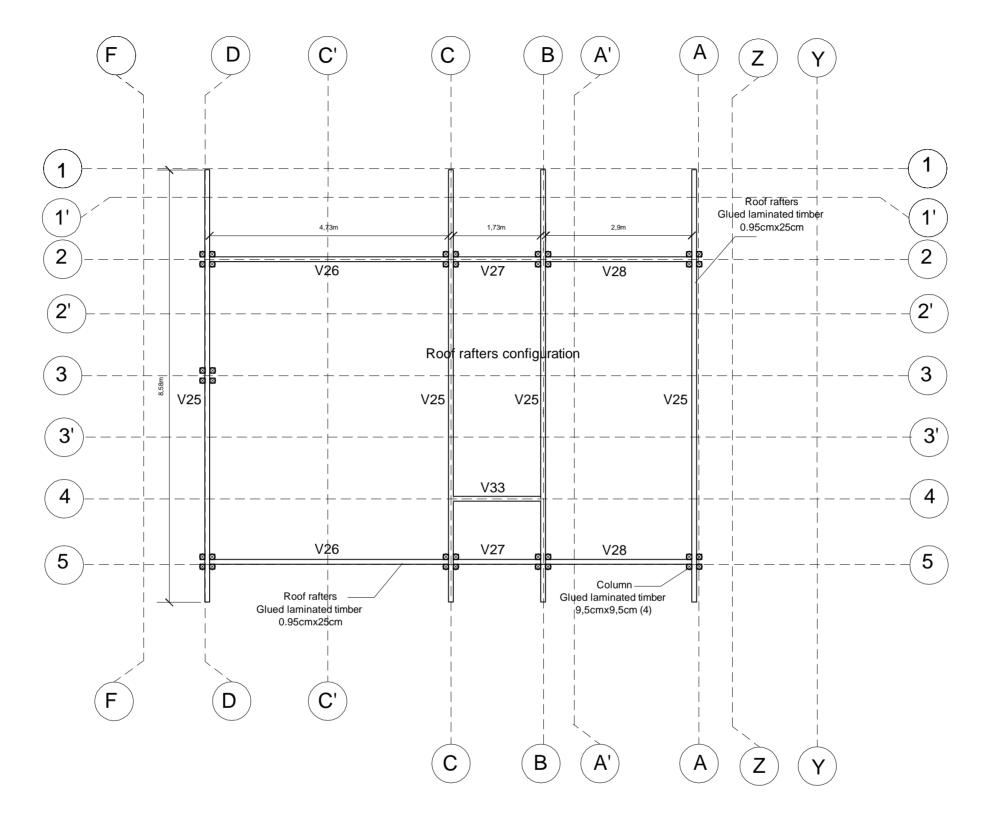
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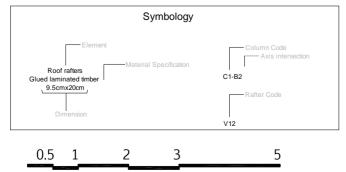
Crown rafters distribution

Scale: 1:75

Date:11/03/2014











Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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Made by: Department of construction

Sheet title

Structural roof plan

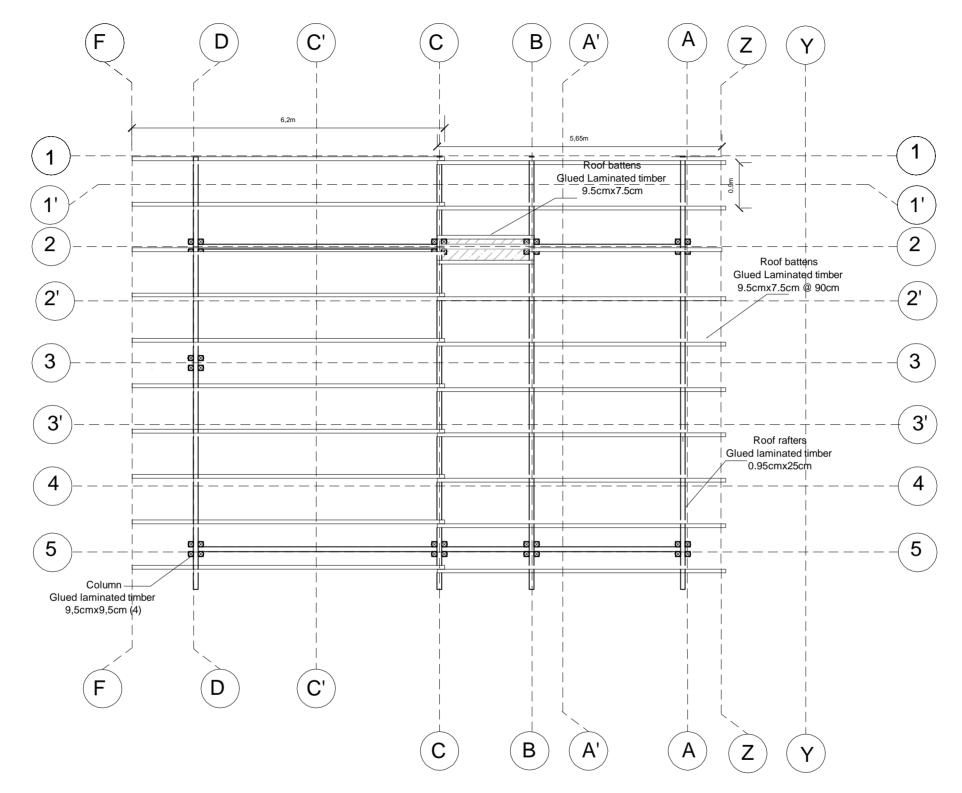
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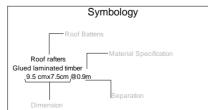
Roof rafters distribution

Scale: 1:75

Date:11/03/2014













Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



PROFESIONAL RESPONSABLE: DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B N° REG. IC 5721

Made by: Department of constructionn

Sheet title

Structural Roof Plan

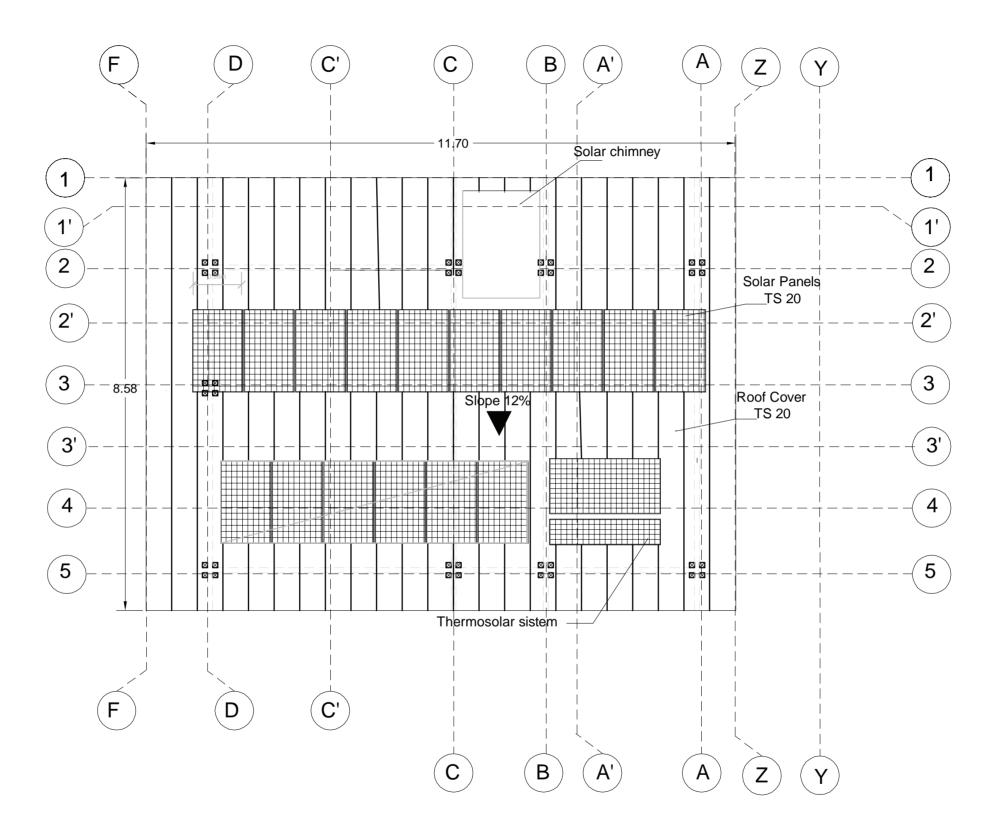
Content

Roof battens distribution

Scale: 1:75

Date:11/03/2014











Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Made by: Department of construction

Sheet title

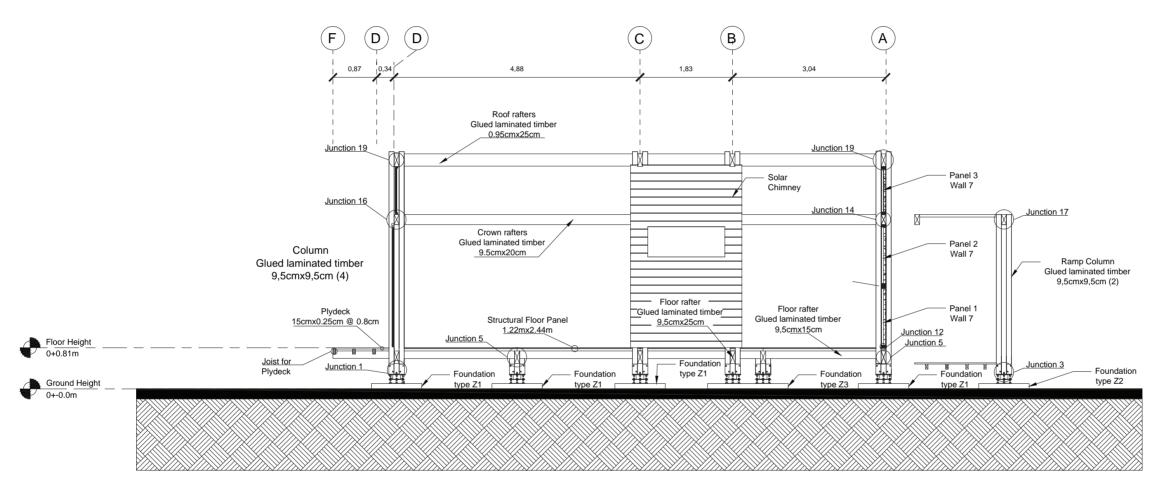
Structural Roof Plan

Content:

Roof Cover Total Span

Scale: 1:75

Date:11/03/2014



SECTION 1-1





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



PROFESIONAL RESPONSABLE: DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

Made by: Department of construction.

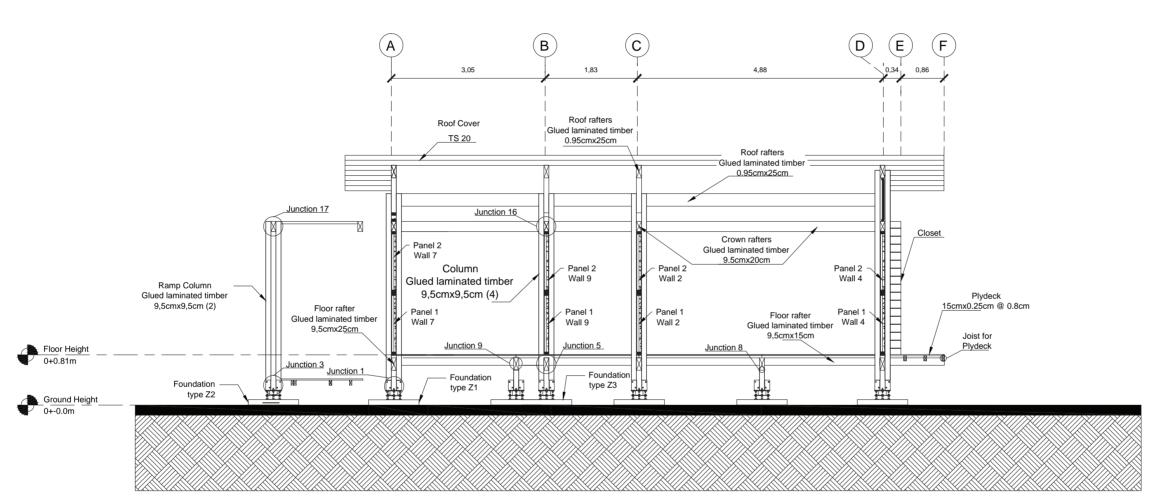
Sheet title

Structural sections.

Content: Section 1-1

Scale: 1:75

Date:11/03/2014



SECTION 2-2





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



PROFESIONAL RESPONSABLE DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR

Made by: Department of construction.

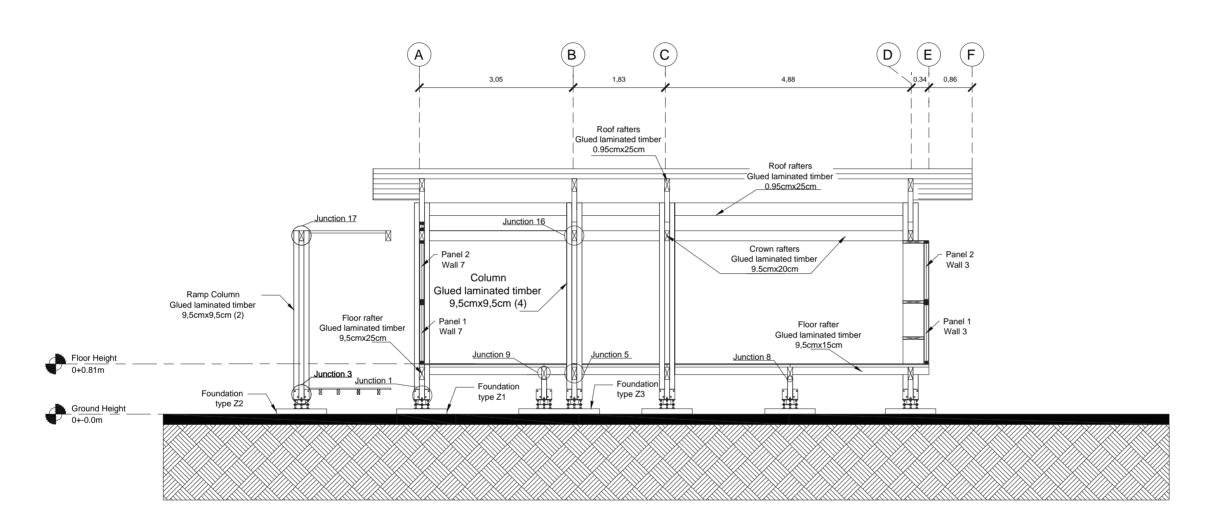
Sheet title

Structural sections.

Content: Section 2-2

Scale: 1:75

Date:11/03/2014



SECTION 3-3





Deliverable #7 Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

Made by: Department of construction.

Sheet title

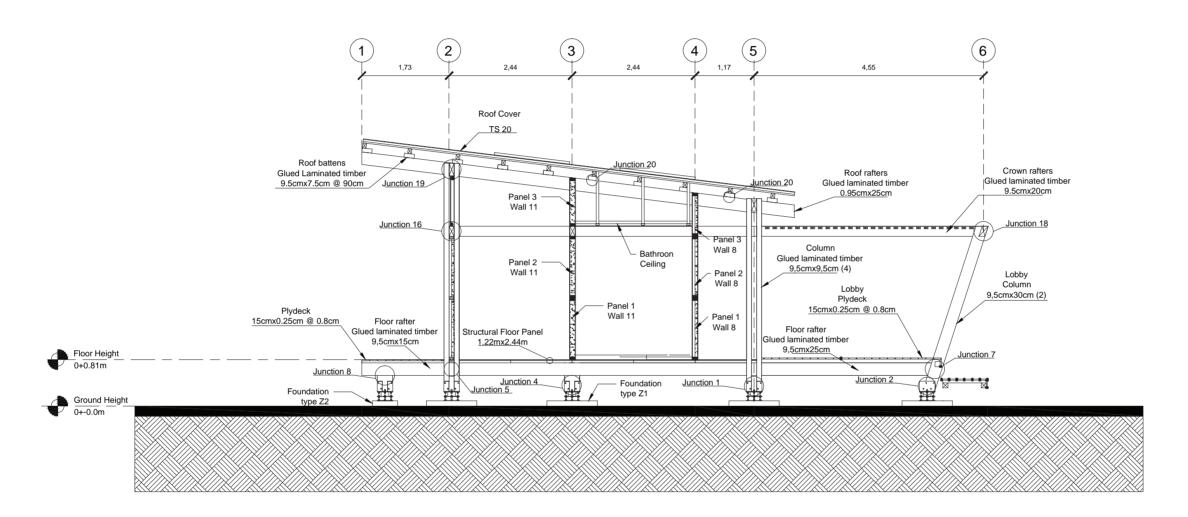
Structural sections.

Content: Section 3-3

Scale: 1:75

Date:11/03/2014

Code:



SECTION C-C





Deliverable #7
Project Drawings

Proyect: Trópika

am: Tec Team

Country: Costa Rica

Professional seal:



PROFESIONAL RESPONSABLE: DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

Made by: Department of construction.

Sheet title

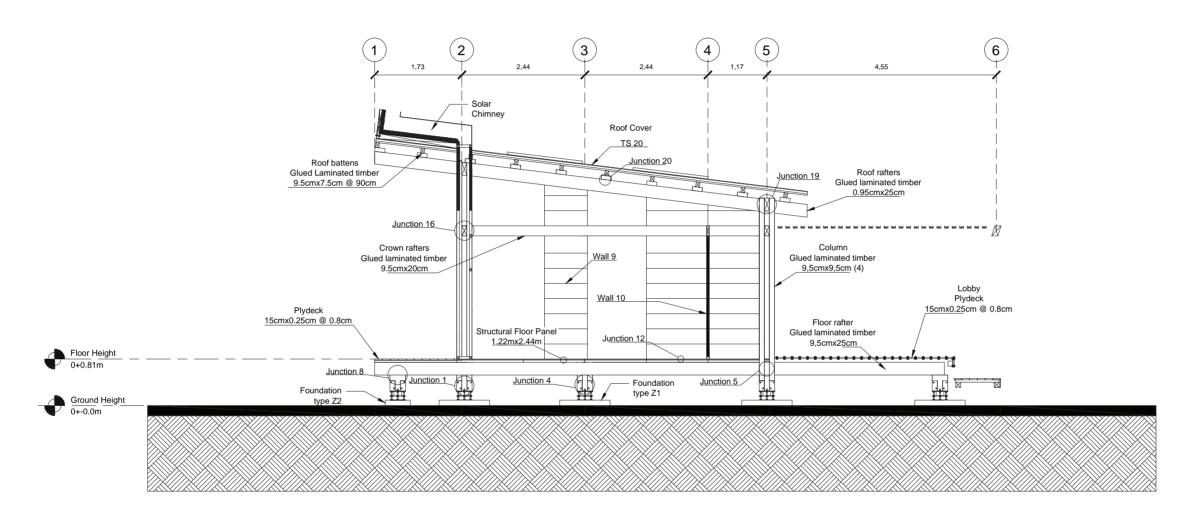
Structural Sections.

Content: Section C-C

Scale: 1:75

Date:11/03/2014

Code:



SECTION B-B





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Made by: Department of construction.

Sheet title

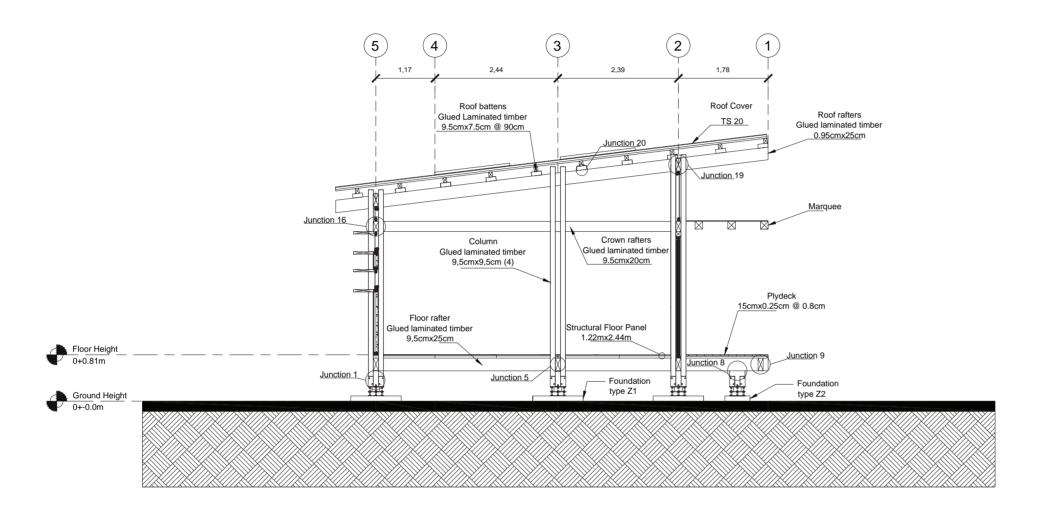
Structural sections

Content: Section B-B

Scale: 1:75

Date:11/03/2014

Code:



SECTION A-A





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



PROFESIONAL RESPONSABLE: DIRECCION TECNICA:

Made by: Department of construction.

Sheet title

Structural sections.

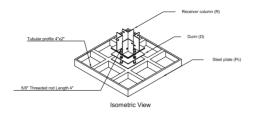
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Scale: 1:75

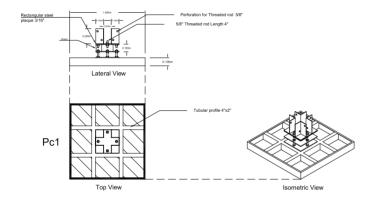
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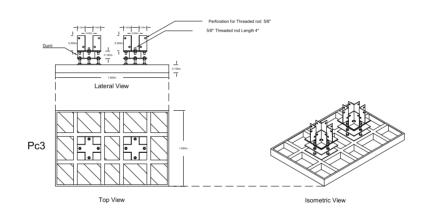
Footing general parts



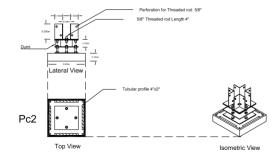
Footing Z1



Footing Z3



Footing Z2



Receiver column detail







Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Made by: Department of construction

Sheet title

Structural Details

Content: Footing Detail

Scale: 1:50

Date:11/03/2014

Rafter	Dimension						
Code	a (m)	b (m)	l(m)				
V1	0.095	0.25	7.83				
V2	0.095	0.15	1.22				
V3	0.095	0.15	2.29				
V4	0.095	0.15	2.34				
V5	0.095	0.15	1.73				
V6	0.095	0.15	0.51				
V7	0.095	0.25	3.64				
V8	0.095	0.25	3.54				
V9	0.095	0.15	2.9				
V10	0.095	0.15	6.92				
V11	0.095	0.15	1.62				
V12	0.05	0.1	1.12				
V13	0.05	0.1	1.07				
V14	0.05	0.1	1.63				
V15	0.05	0.1	1.72				
V16	0.095	0.2	6.1				
V17	0.095	0.2	4.73				
V18	0.095	0.2	1.73				
V19	0.095	0.2	2.9				
V20	0.095	0.2	4.57				
V21	0.095	0.2	4.47				
V22	0.095	0.2	7.12				
V23	0.095	0.2	2.19				
V24	0.095	0.2	3.51				
V25	0.095	0.25	8.65				
V26	0.095	0.25	4.73				
V27	0.095	0.25	1.73				
V28	0.095	0.25	2.9				
V29	0.095	0.15	0.35				
V30	0.095	0.15	2.2				

Rafters Section

Principal floor and roof rafters

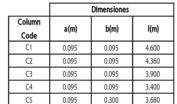


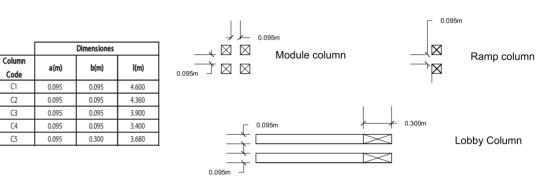




Roof Battens

Column Section





Roof	Dimension							Dimension						
Battens	a (m)	b (m)	l (m)											
Cl1	0.075	0.095	6.000											
Cl2	0.075	0.095	6.200											
Cl3	0.050	0.075	2.440											
Cl4	0.050	0.075	3.050											

Roof Battens Section







Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Made by: Department of construction

Sheet title

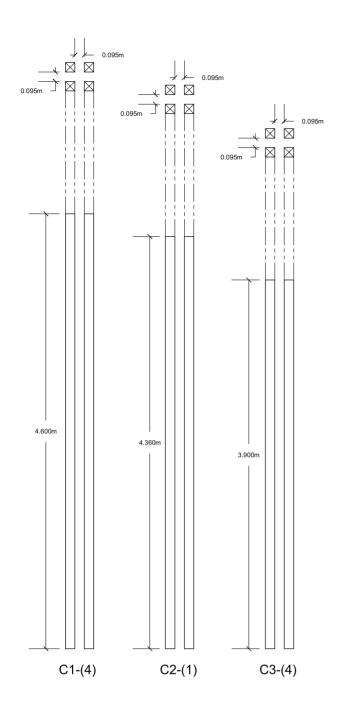
Structural Details

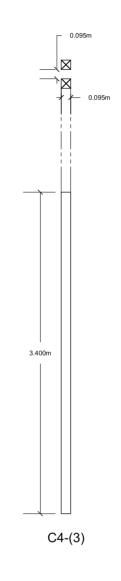
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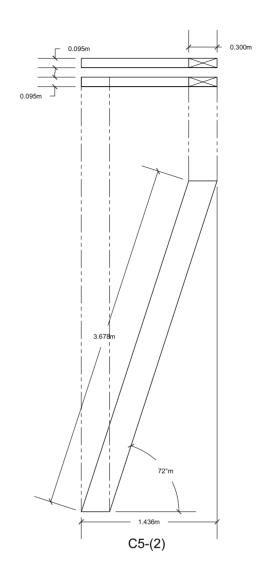
Rafters, columns and roof battens codes.

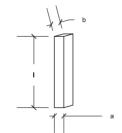
Scale: 1:50

Date:11/03/2014









Symbology

C1-(4)

Column ____ Quantity





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Made by: Department of construction

Sheet title

Structural Details

Content: Columns Details

Scale: 1:40

Date:11/03/2014









Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:





Sheet title

Structural Details

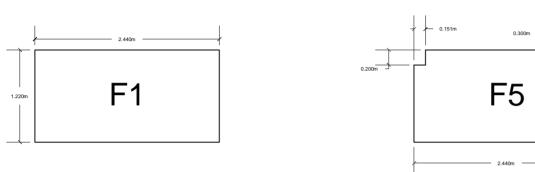
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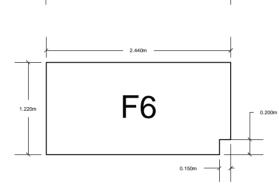
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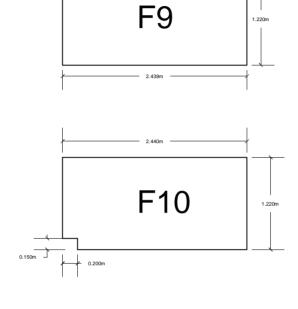
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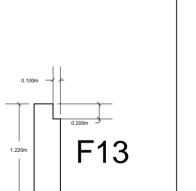
Date:11/03/2014

ST-304

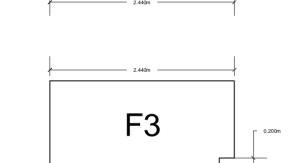




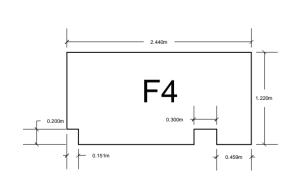


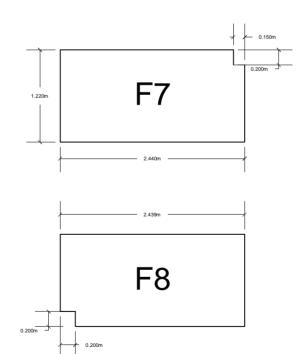


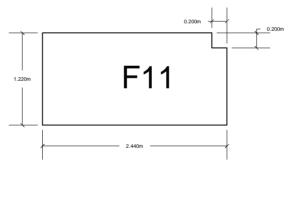
F12

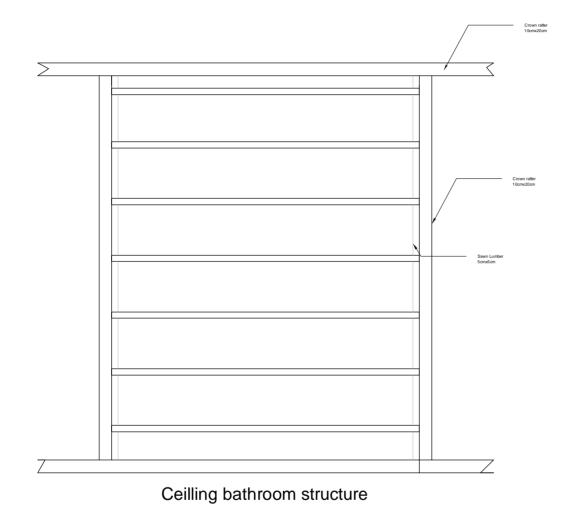


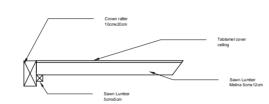
F2











Ceilling detail





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



PROFESIONAL RESPONSABLE: DIRECCION TECNICA: NOMBRE: ING. ERICH NEUROHR B. N° REG. IC 5721

Made by: Department of construction

Sheet title

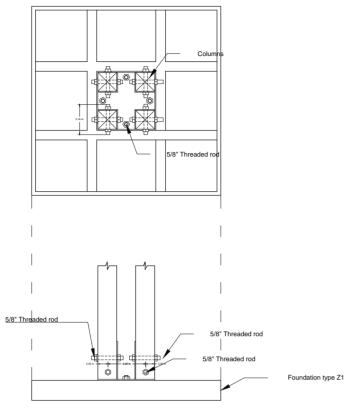
Structural Details

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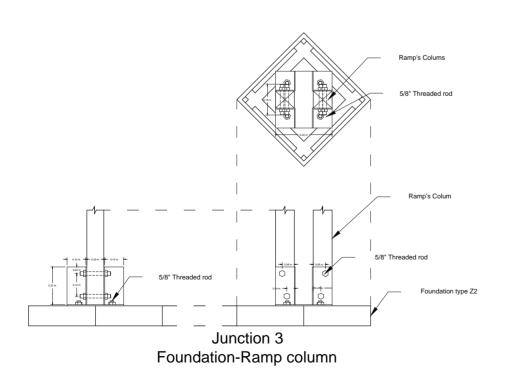
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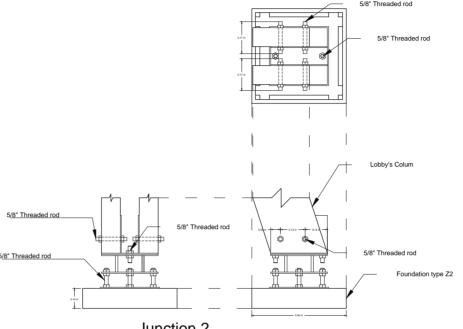
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Code:

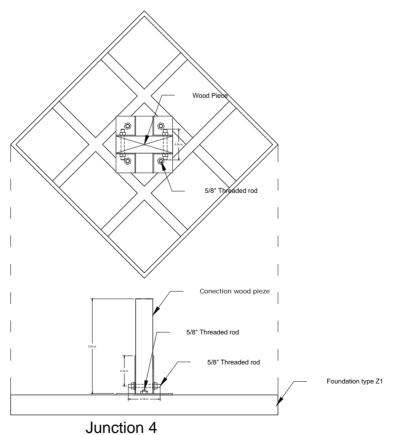


Junction 1
Foundation-Module Column





Junction 2 Foundation-Lobby Column



Foundation-Conection wood pieze





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Made by: Department of Engineering

Sheet title

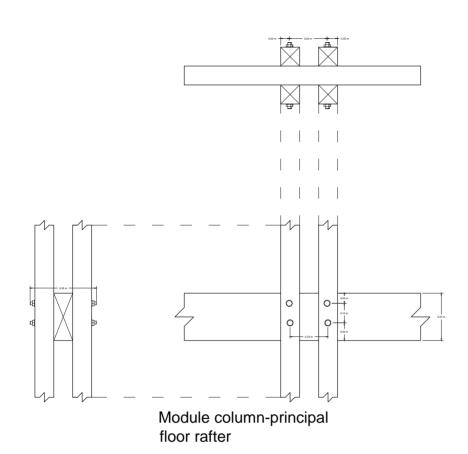
Junctions details 1

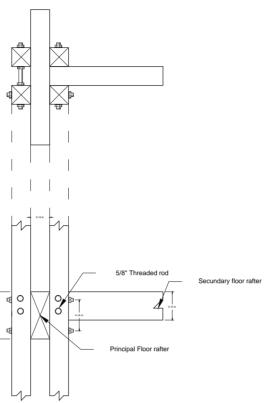
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Junctions details between foundations and different elements

Scale: 1:20 Date 11/02/2014

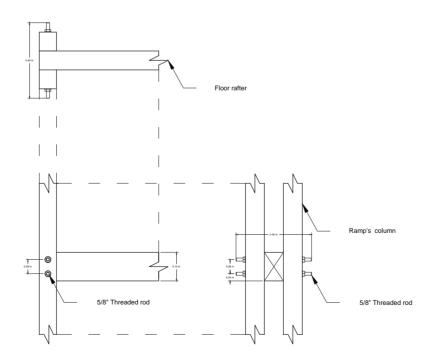
de: ST-306





Module column-principal floor rafter-secundary floor rafter union

Junction 5
Module Column-Principal floor rafter-Secundary floor rafter



Junction 6
Ramp Column-Floor rafter





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Made by: Department of Engineering

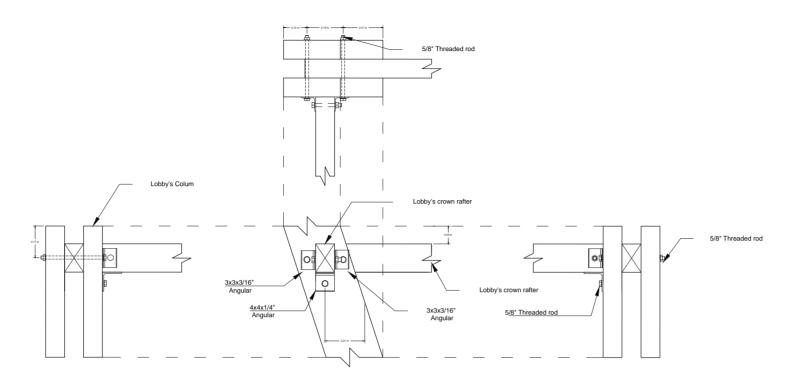
Sheet title

Junctions details 2

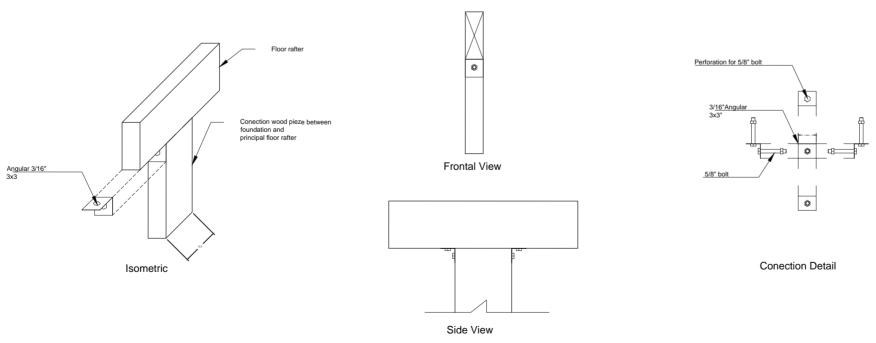
Content: Junctions details between columns and floor rafters.

Scale: 1:20

Date_11/02/2014



Junction 7
Lobby's Column-Principal floor rafter-Secundary floor rafter



Junction 8
Conection wood pieze-Floor principal rafter





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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Made by: Department of Engineering

Sheet title

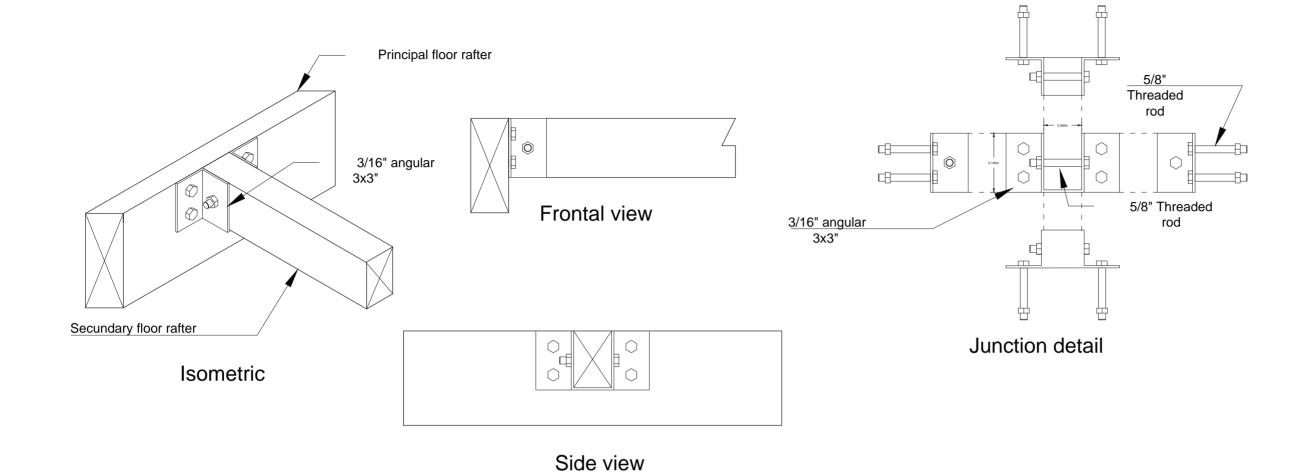
Junctions details 3

Content: Junctions details between floor rafters and diferent elements

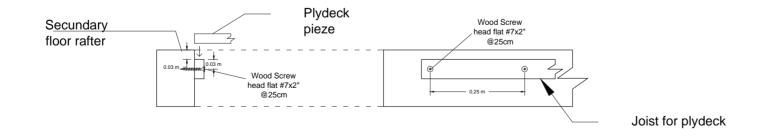
Scale: 1:20

Date 11/02/2014

Code: C



Junction 9
Principal floor rafter-Secundary floor rafter



Junction 10 Secundary floor rafter-Joist for plydeck





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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Made by: Department of Engineering

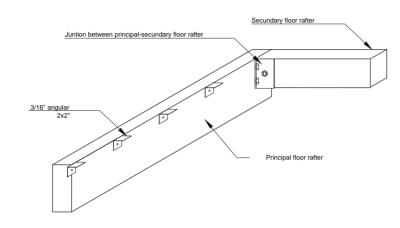
Sheet title

Junctions details 4

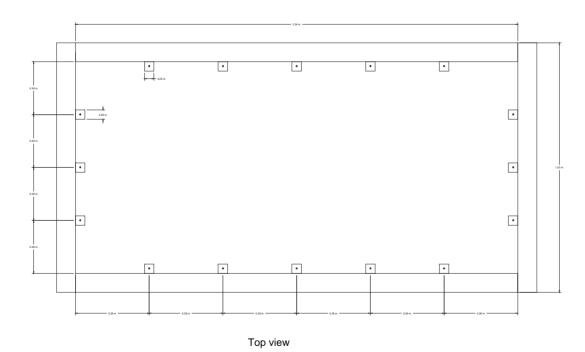
Content: Junctions details
between principal
floor rafter and
secundary floor
rafter; also between
secundary floor rafter
and the joist for the
plydeck.

Scale: 1:10

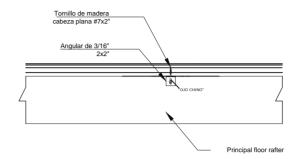
Date_11/02/2014



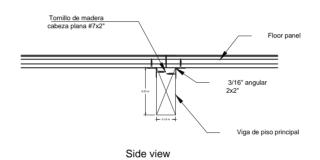
Isometric



Junction 11
Floor rafter-Floor panel



Frontal view











Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Made by: Department of Engineering

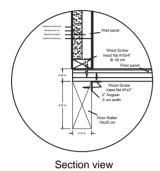
Sheet title

Junctions details 5

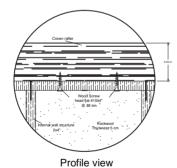
Content: Junctions details
between floor panel
floor rafters, principal
and secundary.

Scale: 1:20

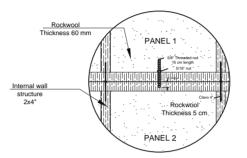
Date 11/02/2014



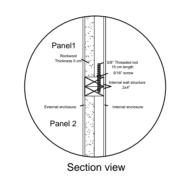
Junction 12 Wall panel- Floor panel

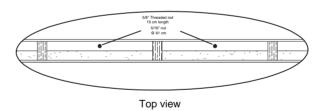


Junction 14
Wall panel-Crown rafter



Profile view





Junction 13 Wall panel-Wall panel





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Team: Tec Team

Country: Costa Rica

Professional seal:



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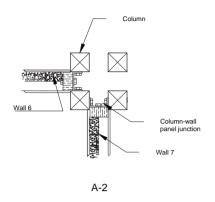
Sheet title

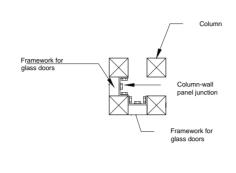
Junctions details 6

Content: Junctions details between walls panels.

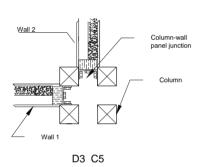
Scale: 1:20

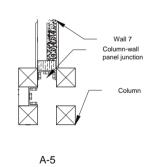
Date_11/02/2014

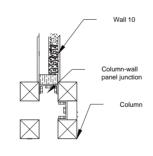




D-2







B-5 Ju



3/<u>16" angular</u> 3x3"

5/8" Threaded rod





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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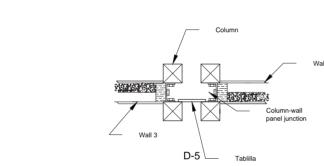
Sheet title

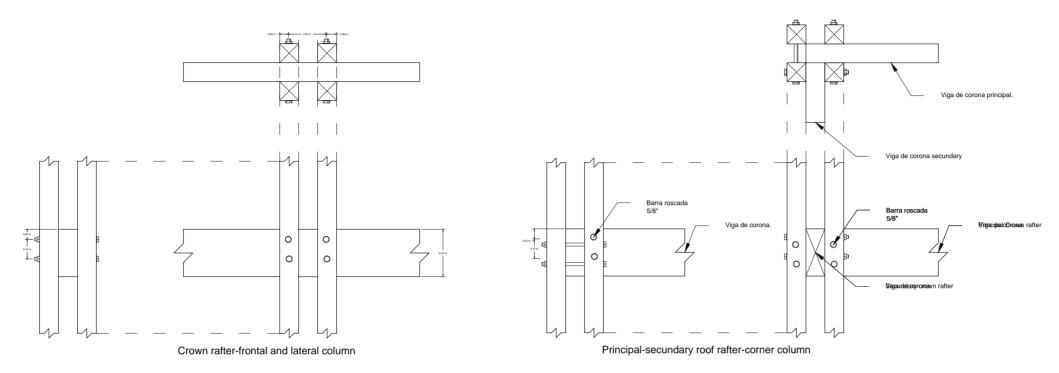
Junctions details 7

Content: Junctions details between walls panels and columns.

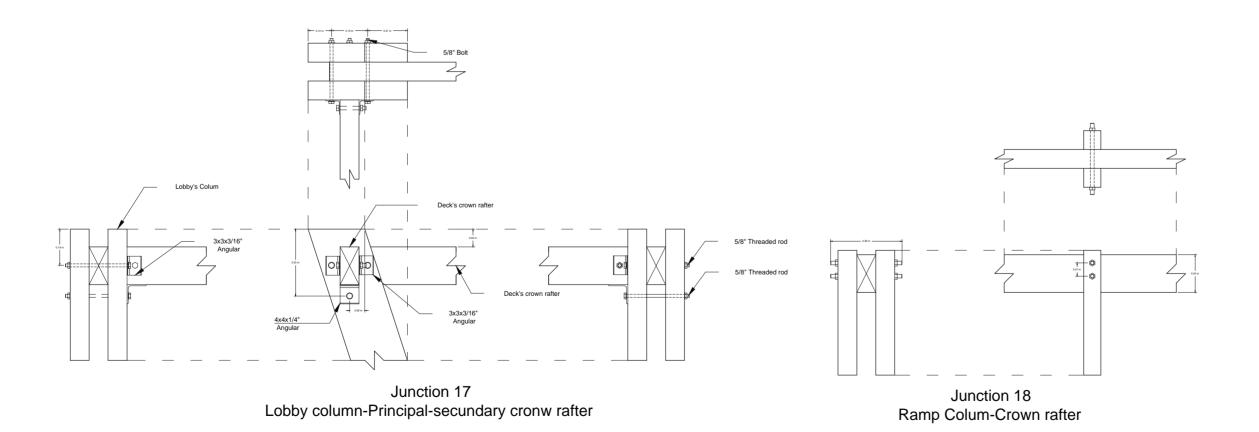
Scale: 1:20

Date_11/02/2014





Junction 16
Module column-principal crown rafter-secundary crown rafter







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Team: Tec Team

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Professional seal:



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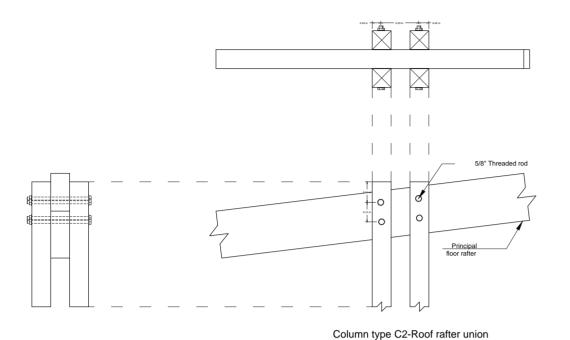
Sheet title

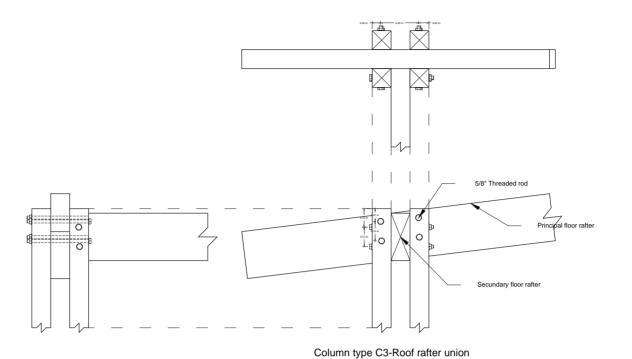
Junctions details 8

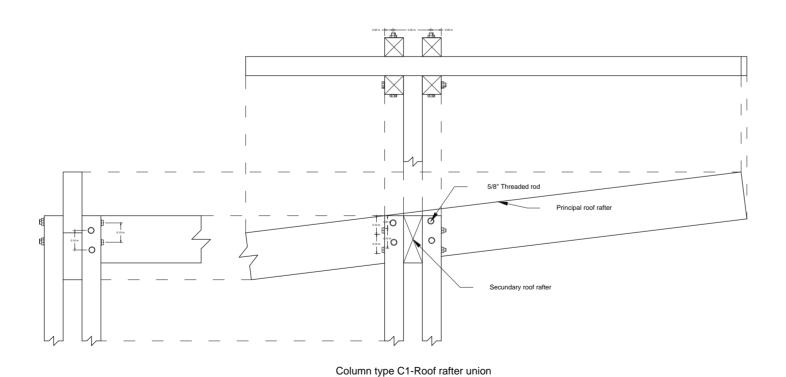
Content: Junctions details
between diferente
types of clumns and
the principal and
secundary crown
rafter.

Scale: 1:20

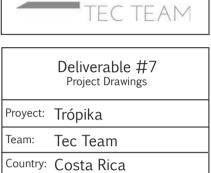
Date 11/02/2014







Junction 19



Solar

Decathlon Europe

INGENIEROS ESTRUCTURALES CONSULTORES ASOCIADOS TEL (506) 2257 7068 FAX (506) 2257 7067

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Professional seal:

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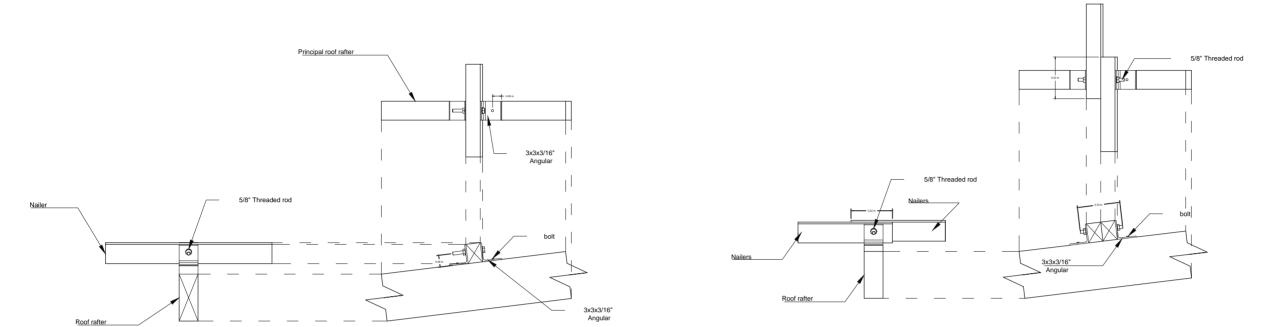
Sheet title

Junctions details 9

Content: Junctions details between diferent types columns and roof rafters.

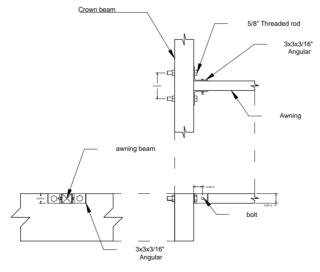
Scale: 1:20

Date 11/02/2014



Junction 20 Principal roof rafter-Nailer

Junction 21 Nailer-Nailer



Junction 22 Marquee-Crown rafter





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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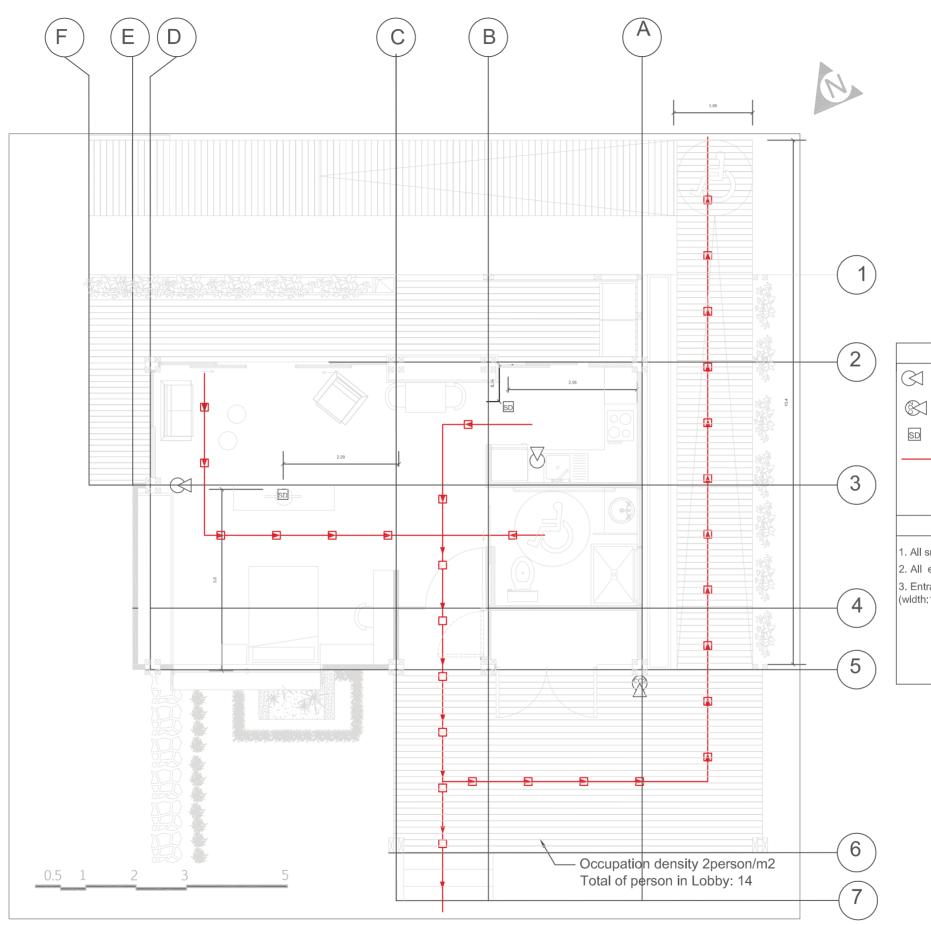
Sheet title

Junctions details 10

Content: Junctions details between roof rafters and nailers, and marquee-crown rafter.

Scale: 1:20

Date 11/02/2014







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Keys Notes

PLAN LEGENDS

Extinguisher ABC_21A-113B

Extinguisher BC_21A-113B

Smoke Detector FG200 Unwired Alar

1. All smoke sensors are embed in the ceiling

Evacuation Route

- 2. All extinguisher are installed 0,9 height floor
- 3. Entrance ramp compliant with rule 51.3 (width:1,56m)

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Sheet title

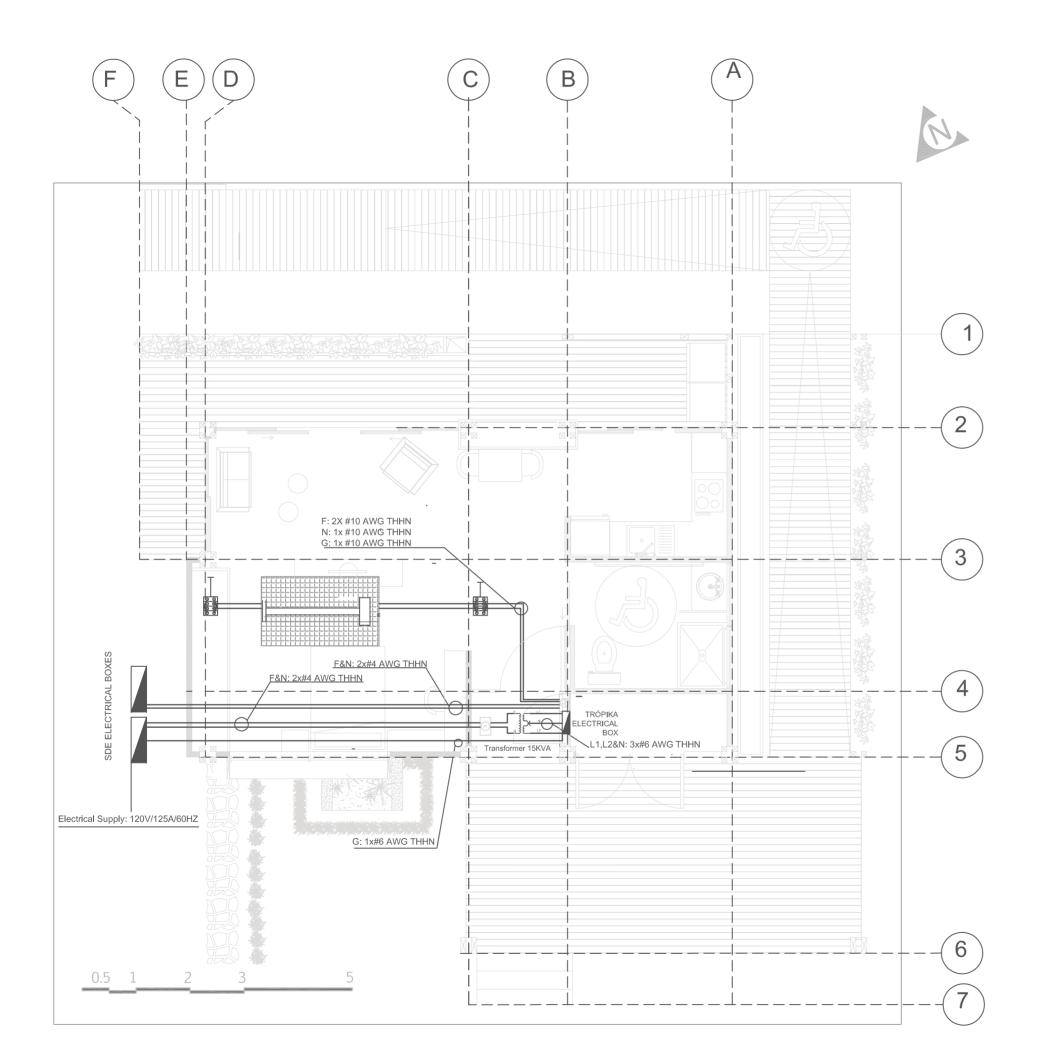
Fire Protection

Content: Detection, Alarm, Evacuation Route and Supression

Scale: 1:75

Date: 11/3/2014

Code: FP-001







ELECTRIC LEGENDS

GENERAL PANEL

SEALED TRANSFORMER 15kVA

JUNCTION BOX NEMA 3R

PV SYSTEM GENERATION

M ENERGY METER

Keys Notes

- 1. SDE Interconection point, location to be confirmed
- 2. Canalization with 31.750mm Metallic Conduit
- 3. #6 AWG (13.3 mm2)
- 4. #8 AWG (8.37 mm2)
- 5. #10 AWG (5.26 mm2)

Deliverable #7
Project Drawings

Proyect: Trópika

m: Tec Team

Country: Costa Rica

Professional seal:



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Sheet titl

Grid Inteconnection

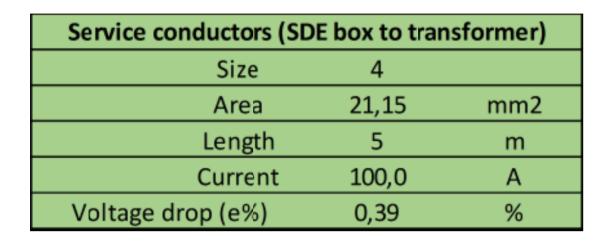
Content: Grid Interconnection
Diagram

Scale: 1:75

Date:03/11/2014

Code: **EL-001**

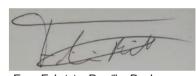




Service conductors (Tr	Service conductors (Transformer to PB-EL)								
Size	Size 6								
Area	13,3	mm2							
Length	15	m							
Current	50,0	А							
Voltage drop (e%)	0,94	%							



	Deliverable #7 Project Drawings
Proyect:	Trópika
Team:	Tec Team
Country:	Costa Rica
Professio	nal seal:



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Sheet title
Grid Interconnection
Content: Grid Interconnection Specification

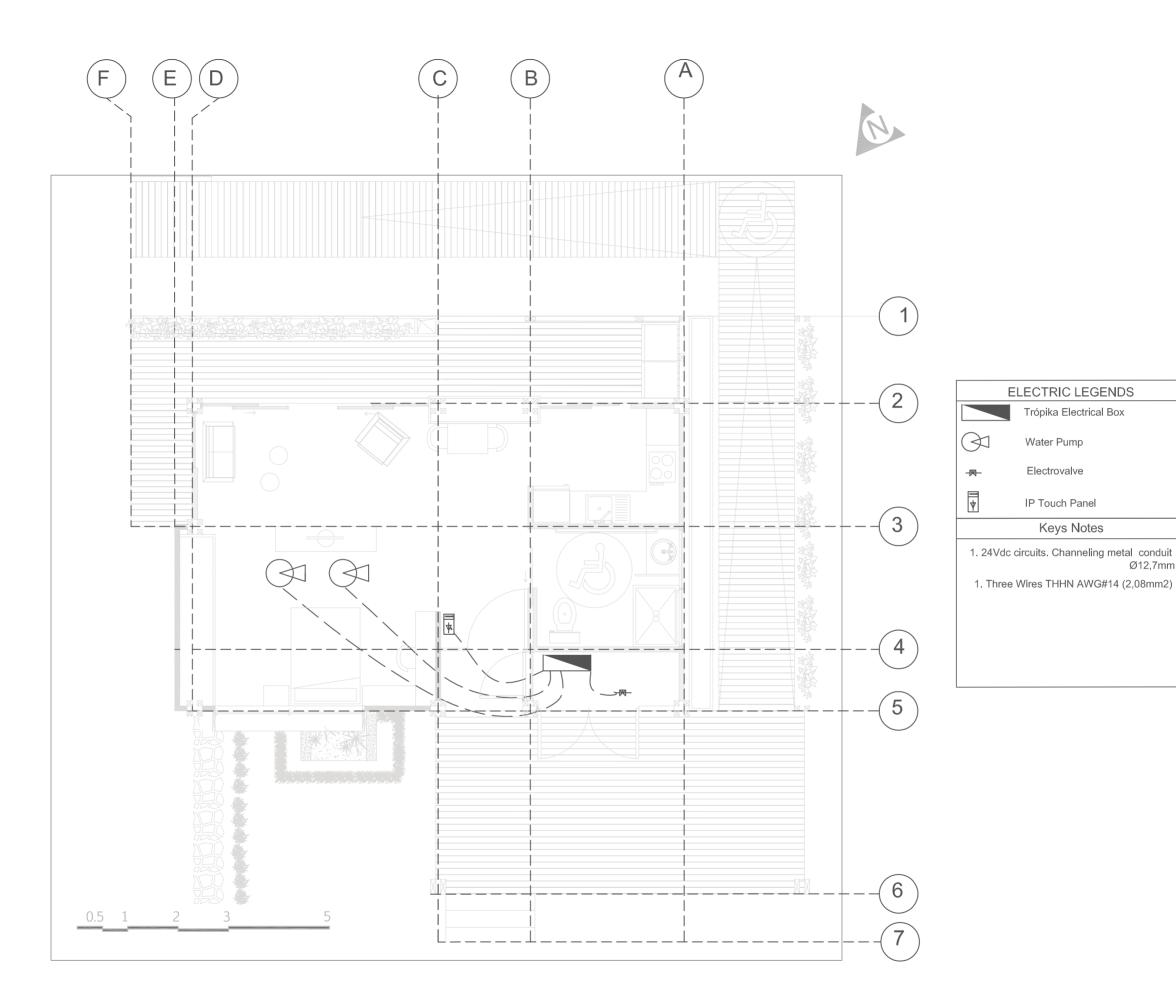
Scale:	NA	Date: 03/11/2014
Code:	EL	-002

Service conductors (SDE	Service conductors (SDE box to transformer)								
2 THHN (L1 and L2) #	4								
1 THHN (N) #	4								
1 THHN (G) #	6								
Conduit diameter	35	mm							

SDE main Protection								
Voltage	120	V						
Poles	1							
Maximum current	100,0	Α						
Nominal current	110	Α						

Service conductors (Transformer to PB-EL)								
2 THHN (L1 and L2) #		6						
1 THHN (N) #		6						
1 THHN (G) #		6						
Conduit diameter	27	mm						

Tropika main Protection (EL)								
Voltage	V							
Poles	2							
Maximum current	50,0	Α						
Nominal current	100	Α						







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

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ELECTRIC LEGENDS

Trópika Electrical Box

Water Pump

Electrovalve

IP Touch Panel

Keys Notes



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Sheet title

DC Wiring

Content:DC Wiring

Scale: 1:75

Date:03/11/2014

EL-201 Code:





Proyect: Trópika

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ELECTRIC LEGENDS

WATER PROOF

Keys Notes

240V HORIZONTALLY INTEGRALLY SWITCHED SIMPLE SOCKET



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Sheet title

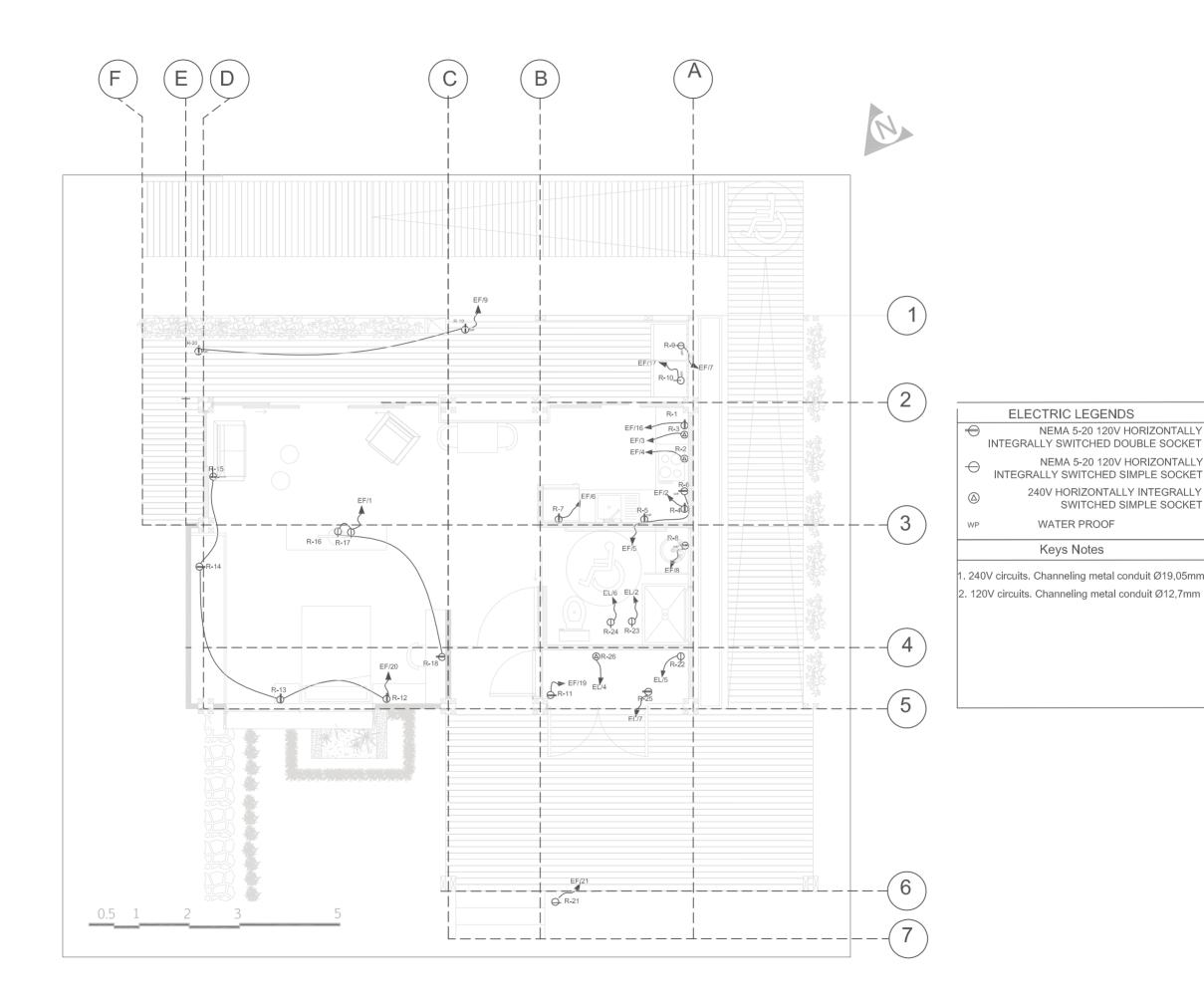
Power Plan

Content: Power Plan Diagram

Scale: 1:75

Date: 03/11/2014

EL-301 Code:



Code	Location	Breaker type	Voltage (V)	Curi (A		Breaker (POL/A)	Circuit	Wire (HEIGHT (m)			
		туре		L1	L2	(FOL/A)		AWG	mm2				
R-1	Kitchen	AFCI	120		14,6	1/15	EF/16	10	5,26	0,60			
R-2	Kitchen	AFCI	240	9,8	9,8	2/15	EF/4	12	3,31	0,60			
R-3	Kitchen	AFCI	240	12,9	12,9	2/20	EF/3	10	8,37	0,90			
R-4	Kitchen	AFCI	120	9,2		1/15	EF/2	12	3,31	1,00			
R-5	Kitchen	GFCI	120		4,17	1/15	EF/5	12	3,31	1,00			
R-6	Kitchen	GFCI	120		4,17	1/15	ЕГ/Э	12	3,31	1,00			
R-7	Kitchen	AFCI	120	1,3		1/15	EF/6	12	3,31	1,10			
R-8	Restroom	GFCI	120	1,3		1/15	EF/8	12	3,31	1,10			
R-9	Laundry	GFCI	120	11,5		1/15	EF/7	12	3,31	0			
R-10	Laundry	GFCI	120		7,8	1/15	EF/17	10	5,26	0			
R-11	Electrical/mechanical room	AFCI	120		2,6	1/15	EF/19	12	3,31	0,90			
R-12	Bedroom												
R-13	Bedroom	AFCI	AFCI	120		2,6	1/15	EF/20	12	3,31	0,60		
R-14	Bedroom												
R-15	Flexible area												
R-16	Multimedia									0			
R-17	Multimedia	AFCI	AFCI	AFCI	AFCI	120		1,1	1/15	EF/1	12	3,31	0
R-18	Work-station									0,90			
R-19	Terrace	GFCI	120		2,5	1/15	EF/9	12	3,31	0			
R-20	Terrace	Gru	120		2,3	1,15	,,	_	-,52	0			
R-21	Lobby	GFCI	120		0,4	1/15	EF/21	12	3,31	0			
R-22	Electrical/ mechanical room	GFCI	120		4,2	1/15	EL/5	12	3,31	1,20			
R-23	Electrical/ mechanical room	GFCI	120	9,0		1/15	EL/2	12	3,31	2,70			
R-24	Electrical/ mechanical room	GFCI	120		6,7	1/15	EL/6	12	3,31	2,70			
R-25	Electrical/ mechanical room	GFCI	120		9,0	1/15	EL/7	12	3,31	0			
R-26	Electrical/ mechanical room	GFCI	240	0,6		1/15	EL/4	12	3,31	0			





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Sheet title

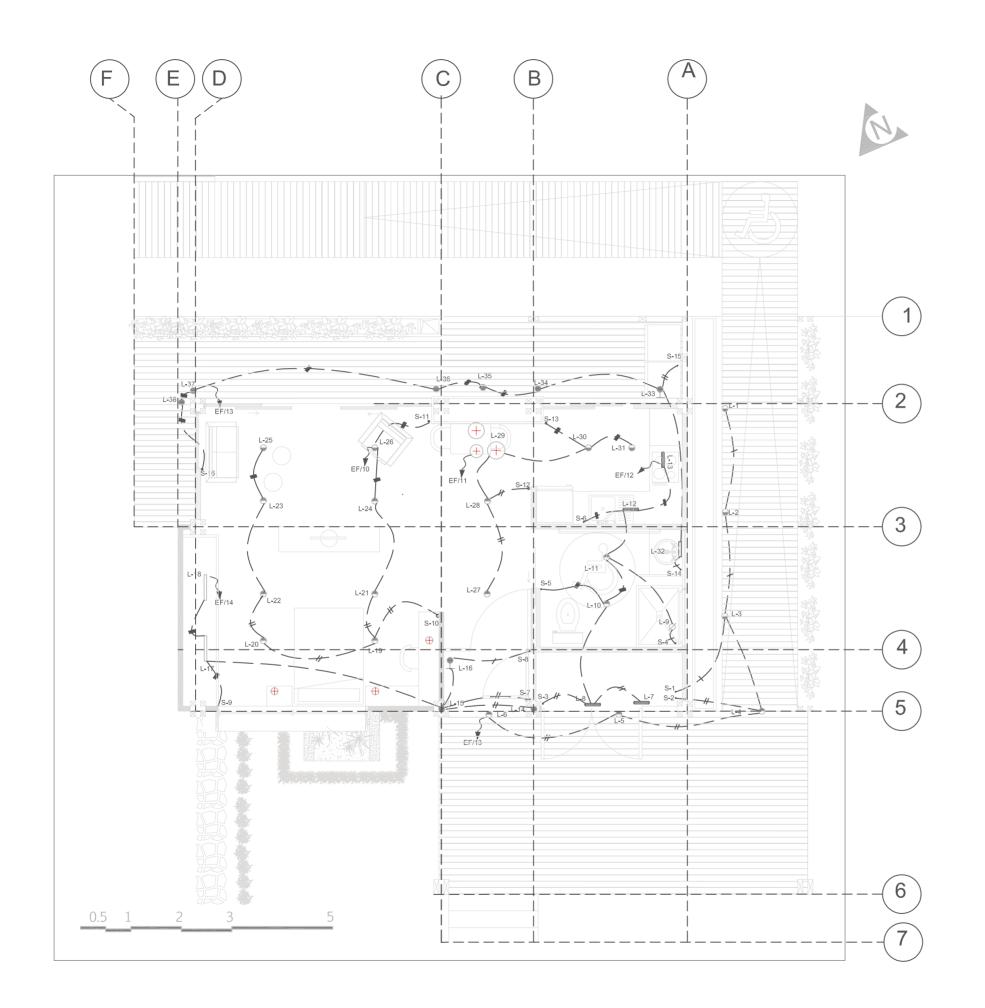
Power Plan

Content: Power Plan
Specification

Scale: NA

Date:03/11/2014

Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

ELECTRIC LEGENDS

1 title

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Sheet title

Lighting Plan

Content: Lighting Plan Diagram

Scale: 1:75

Date:03/11/2014

Code: EL-401

Code	Location	Configuration (R: recessed;	Туре	Circuit	Switch	Voltage (V)	Current (A)	Breaker (POL/A)		Wire gaude (AW	G)	
Code	Location	M: mounted)	Туре	Circuit	Switch	voitage (v)	Current (A)	Breaker (POL/A)	Line	Neutral	Earth	
L-1	Green tunnel	R: Floor	Exterior									
L-2	Green tunnel	R: Floor	Exterior		S1							
L-3	Green tunnel	R: Floor	Exterior	EF/13								
L-4	Lobby	R: Ceiling	Exterior			120	0,2	1/15	#12	"42	414	
L-5	Lobby	R: Ceiling	Exterior		S2	120	0,2	1/13	#12	#12	#14	
L-6	Lobby	R: Ceiling	Exterior									
L-7	Machine room	R: Floor	Led strip									
L-8	Machine room	R: Floor	Led strip		S3							
L-9	Shower	R: Ceiling	Water proof		S4]						
L-10	Restroom	R: Ceiling	Interior	EF/12	S5	120	0,5	1/15	#12	#12	#14	
L-11	Restroom	R: Ceiling	Interior		33			1/15				
L-12	Kitchen Furniture	R: Ceiling	Led strip		S6]						
L-13	Kitchen Furniture	R: Ceiling	Led strip		30							
L-14	Principal Entrance	R: Floor	Spot		67							
L-15	Principal Entrance	R:Floor	Spot	EF/15		S7						
L-16	Principal Door	M:Door	Exterior	EF/15	S8	120	0,2	1/15	#12	#12	#14	
L-17	Closet	R: Closet	Led strip		S9	1						
L-18	Closet	R: Closet	Led strip									
L-19	Bedroom	R: Ceiling	Spot									
L-20	Bedroom	R: Ceiling	Spot		S10							
L-21	Bedroom	R: Ceiling	Spot	EF/10								
L-22	Bedroom	R: Ceiling	Spot					1/15				
L-23	Flexible area	R: Ceiling	Spot		120	0,4	1/15	#12	#12	#14		
L-24	Flexible area	R: Ceiling	Spot		S11							
L-25	Flexible area	R: Ceiling	Spot									
L-26	Flexible area	R: Ceiling	Spot									
L-27	Corridor	R: Ceiling	Spot									
L-28	Corridor	R: Ceiling	Spot		S12							
L-29	Corridor	Pendant	P. lamp	EF/11		120	0,5	1/15	#12	#12	#14	
L-30	Kitchen	R: Ceiling	Spot	,	\$13	1		1, 25				
L-31	Kitchen	R: Ceiling	Spot		313							
L-32	Bathroom Mirror	M:Wall	Interior		S14	<u> </u>						
L-33	Laundry	M:Wall	Exterior		\$15	1						
L-34	Terrace	R:Floor	Exterior	EF/14		120	0,4	1/15	#12	#12	ш1л	
L-35	Terrace	R:Floor	Exterior	EF/ 14	646	120	0,4	1/13	#12	#12	#14	
L-36	Terrace	R:Floor	Exterior		S16							
L-37	Terrace	R:Floor	Exterior									
L-38	Terrace	R:Floor	Exterior									





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Team: Tec Team

Country: Costa Rica

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Sheet title

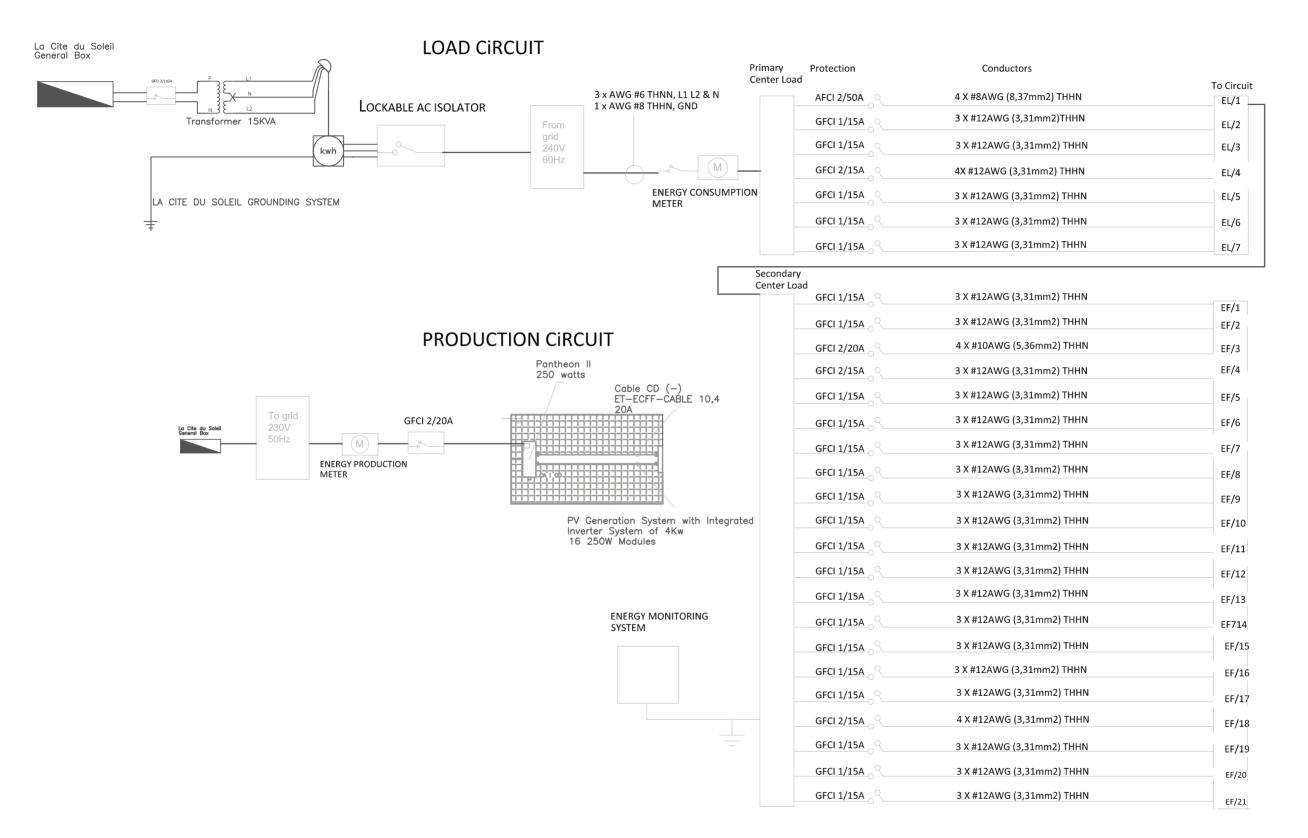
Lighting Plan

Content: Lighting Plan Specification

Scale: N.A

Date: 03/11/2014

Code:







Proyect: Trópika

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Country: Costa Rica

Professional seal:



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Sheet title

One Line Diagram

Content: One Line Diagram

Scale: NA

Pate: 03/11/2014

Code:

Circuit#	Voltage (V)	Demand (VA)	Current		Wire	Wire	Voltage	Drookor		Duct	
			L1 (A)	L2 (A)	Gauge 3 THHN #	length (m)	Drop %	Breaker		Duct	Description
								Pol/A	Туре	mm	
EL/1	240	11069	46,1	46,1	8	2	0,37	2/50	AFCI	19	EF Box
EL/2	120	600	9,0		12	3	0,27	1/15	GFCI	13	Booster
EL/3	120	196,3	1,6		12	8	0,13	1/15	GFCI	13	Small pumps
EL/4	240	150,0	0,6		12	2	0,01	2/15	GFCI	13	Hot Water Tank
EL/5	120	400	4,2		12	3	0,13	1/15	GFCI	13	Water pump
EL/6	120	800		6,7	12	3	0,20	1/15	GFCI	13	Dehumidifier
EL/7	120	600		9,0	12	8	0,73	1/15	GFCI	13	Evaporative Cooler

Detail of protections distribution box PB-EF													
Circuit	Outlets	Voltage (V)	Demand/ Outlet (VA)	Demand (VA)	Current		Wire length	Voltage	Breaker		Duct		Wire
					L1	L2		Drop				Description	diameter
	(n)				(A)	(A)	(m)	%	Pol/A	Туре	mm		(mm2)
EF/1	3	120	43,3	130	1,1		13	0,14	1/15	AFCI	13	Electronics	3,31
EF/2	1	120	1100,0	1100	9,2		10	0,92	1/15	GFCI	13	Microwave oven	3,31
EF/3	1	240	3100,0	3100	12,9	12,9	10	0,82	2/20	GFCI	19	Kitchen hob: Summit SINC2220	5,26
EF/4	1	240	2350,0	2350	9,8	9,8	10	0,99	2/15	GFCI	13	Oven: Bosch HBN42S350E	3,31
EF/5	2	120	500,0	1000	8,3		12	1,01	1/15	GFCI	13	Kitchen appliances	3,31
EF/6	1	120	120,0	120	1,3		14	0,18	1/15	GFCI	13	Refrigerator: Samsung RT32FARLDS	3,31
EF/7	1	120	1100,0	1100	11,5		5	0,58	1/15	GFCI	13	Washing machine: Frigidaire FFFS5	3,31
EF/8	1	120	120,0	120,0	1,3		8	0,10	1/15	GFCI	13	Receptacles: bathroom	3,31
EF/9	3	120	80,0	240,0		2,5	16	0,40	1/15	GFCI	13	Receptacles: Flexible area + Terrac	3,31
EF/10	8	120	6	48		0,4	5	0,02	1/15	AFCI	13	Lighting in bedroom and flexible ar	3,31
EF/11	7	120	6,4	45		0,4	10	0,04	1/15	AFCI	13	Lighting in kitchen and corridor	3,31
EF/12	7	120	7,9	55,5		0,5	14	0,07	1/15	AFCI	13	Lighting in bathroom, kitchen forni	3,31
EF/13	6	120	4,5	27		0,2	16	0,04	1/15	AFCI	13	Lighting in lobby and green tunnel	3,31
EF/14	7	120	3,1	22		0,2	12	0,02	1/15	AFCI	13	Lighting in terrace, bathroom mirro	3,31
EF/15	5	120	5	25		0,2	10	0,02	1/15	AFCI	13	Lighting in main door and closet	3,31
EF/16	1	120	1400,0	1400		14,6	10	0,92	1/15	GFCI	13	Dischwasher: Bosch SHX4AP05UC	5,26
EF/17	1	120	750,0	750		7,8	5	0,39	1/15	GFCI	13	Clothes Dryer: FFSG5115P A / W	3,31
EF/18	1	240	300,0	500	4,2	4,2	3	0,13	2/15	AFCI	13	Home Automation: KNX	3,31
EF/19	1	120	250,0	250,0		2,6	5	0,13	1/15	GFCI	13	Receptacles: Electrical/mechanical	3,31
EF/20	4	120	60,0	240,0		2,5	12	0,30	1/15	AFCI	13	Receptacles in bedroom, general u	3,31
EF/21	1	120	50,0	50,0		0,4	8	0,03	1/15	GFCI	13	Receptacles: Exhibition, lobby area	3,31





Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

1 this

Professional ID: MI-25961

Made by: Department of Engineering

Sheet title

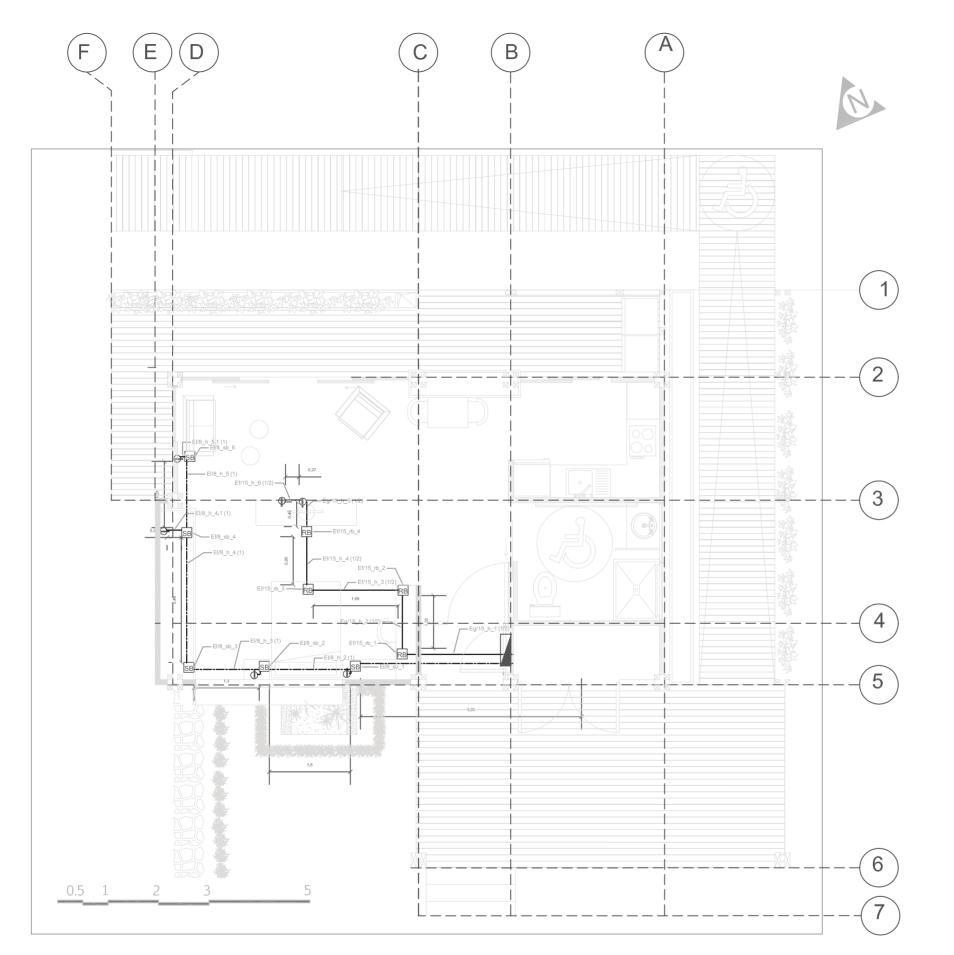
One Line Diagram

Content: Protection Box Specification

Scale: NA

Date: 03/11/2014

Code:







ELECTRIC LEGENDS

NEMA 5-20 120V HORIZONTALLY
INTEGRALLY SWITCHED DOUBLE SOCKET

NEMA 5-20 120V HORIZONTALLY INTEGRALLY SWITCHED SIMPLE SOCKET

(a) 240V HORIZONTALLY INTEGRALLY SWITCHED SIMPLE SOCKET

WATER PROOF

Keys Notes

1. 240V circuits. Channeling metal conduit Ø19,05mm 2. 120V circuits. Channeling metal conduit Ø12,7mm Deliverable #7
Project Drawings

Proyect: Trópika

eam: Tec Team

Country: Costa Rica

Professional seal:



Eng. Fabricio Bonilla Pacheco Professional ID: MI-25961

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Sheet title

AC Layout

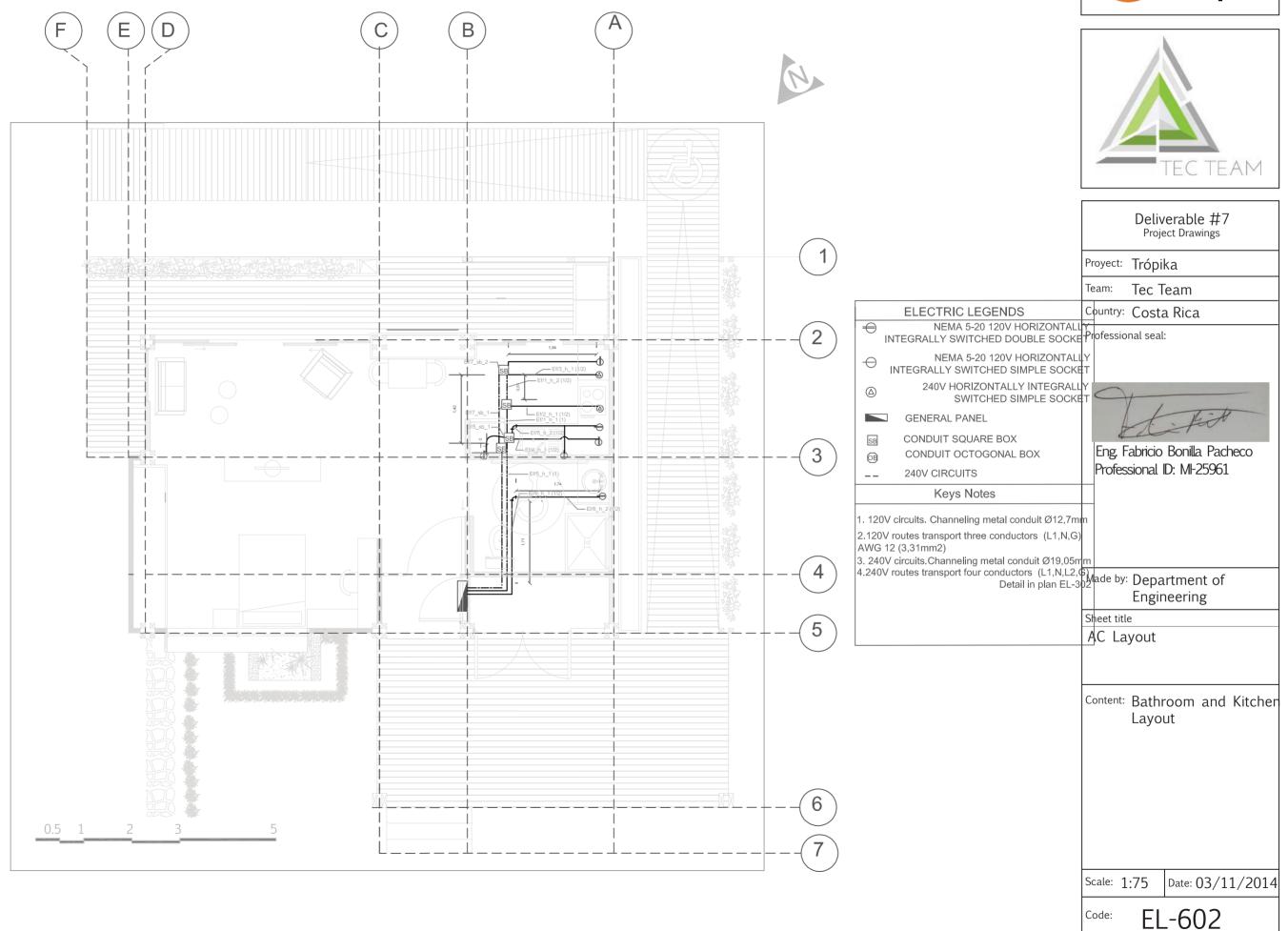
Content: Flexible Area Layout

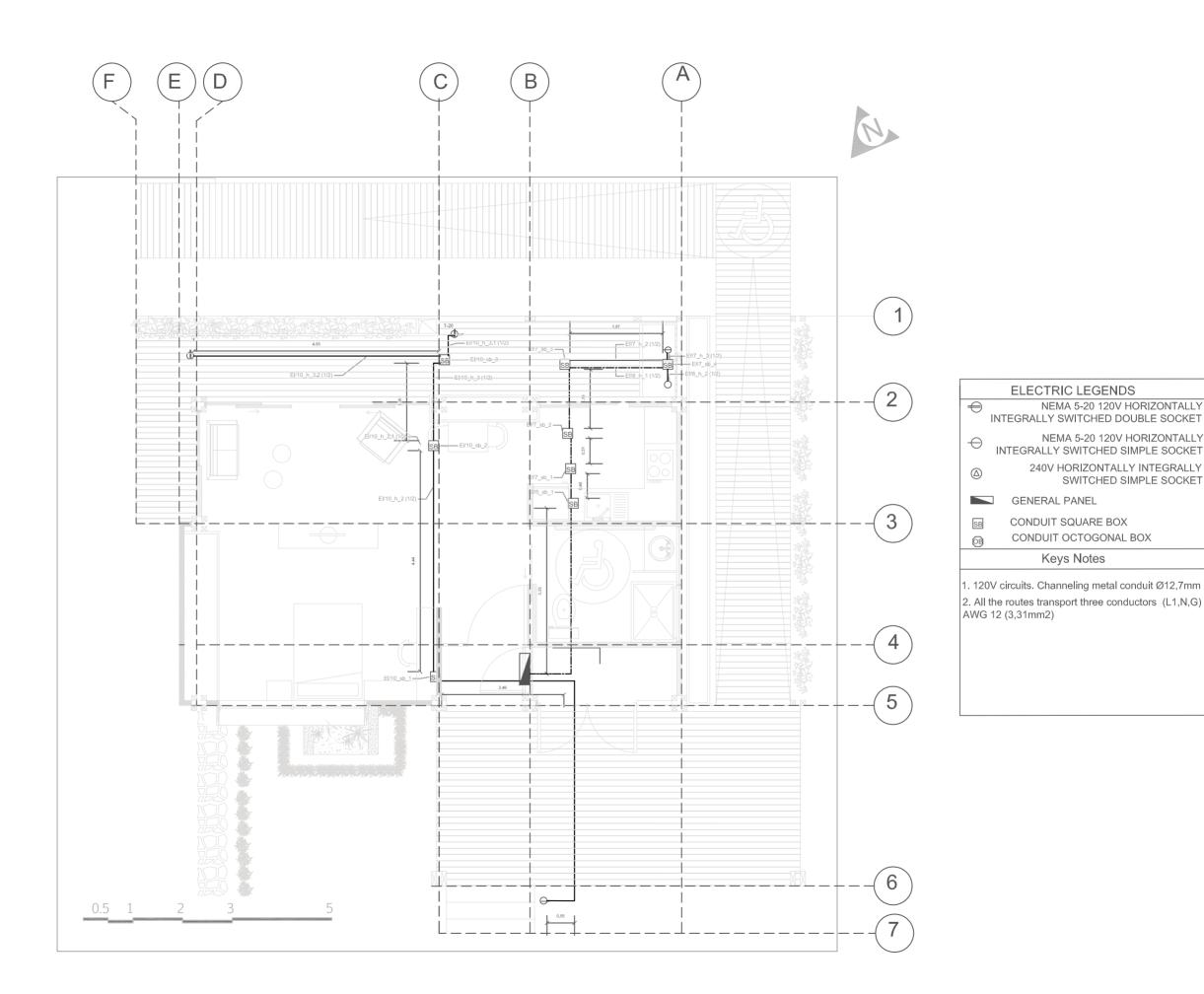
Scale: 1:75

Date: 03/11/2014

Code: **EL-601**











Proyect: Trópika

Tec Team

ELECTRIC LEGENDS

CONDUIT SQUARE BOX CONDUIT OCTOGONAL BOX

Keys Notes

NEMA 5-20 120V HORIZONTALLY INTEGRALLY SWITCHED DOUBLE SOCKET

INTEGRALLY SWITCHED SIMPLE SOCKET

NEMA 5-20 120V HORIZONTALLY

240V HORIZONTALLY INTEGRALLY SWITCHED SIMPLE SOCKET

Country: Costa Rica

Professional seal:



Eng. Fabricio Bonilla Pacheco Professional ID: MI-25961

Made by: Department of Engineering

Sheet title

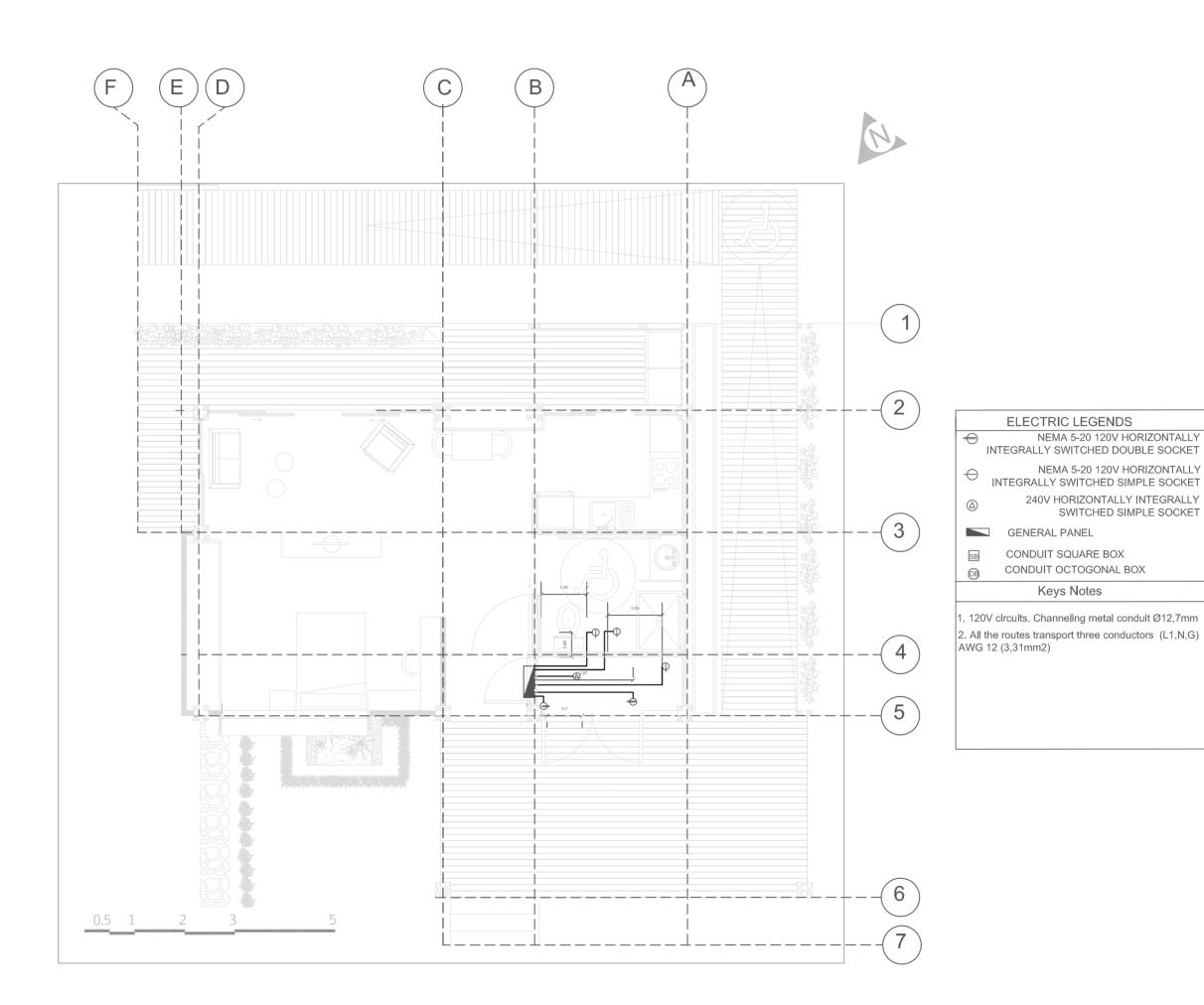
AC Layout

Content: External Sockets

Scale: 1:75

Date: 03/11/2014

EL-603 Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

ELECTRIC LEGENDS

GENERAL PANEL

CONDUIT SQUARE BOX CONDUIT OCTOGONAL BOX

Keys Notes

240V HORIZONTALLY INTEGRALLY SWITCHED SIMPLE SOCKET



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Made by: Department of Engineering

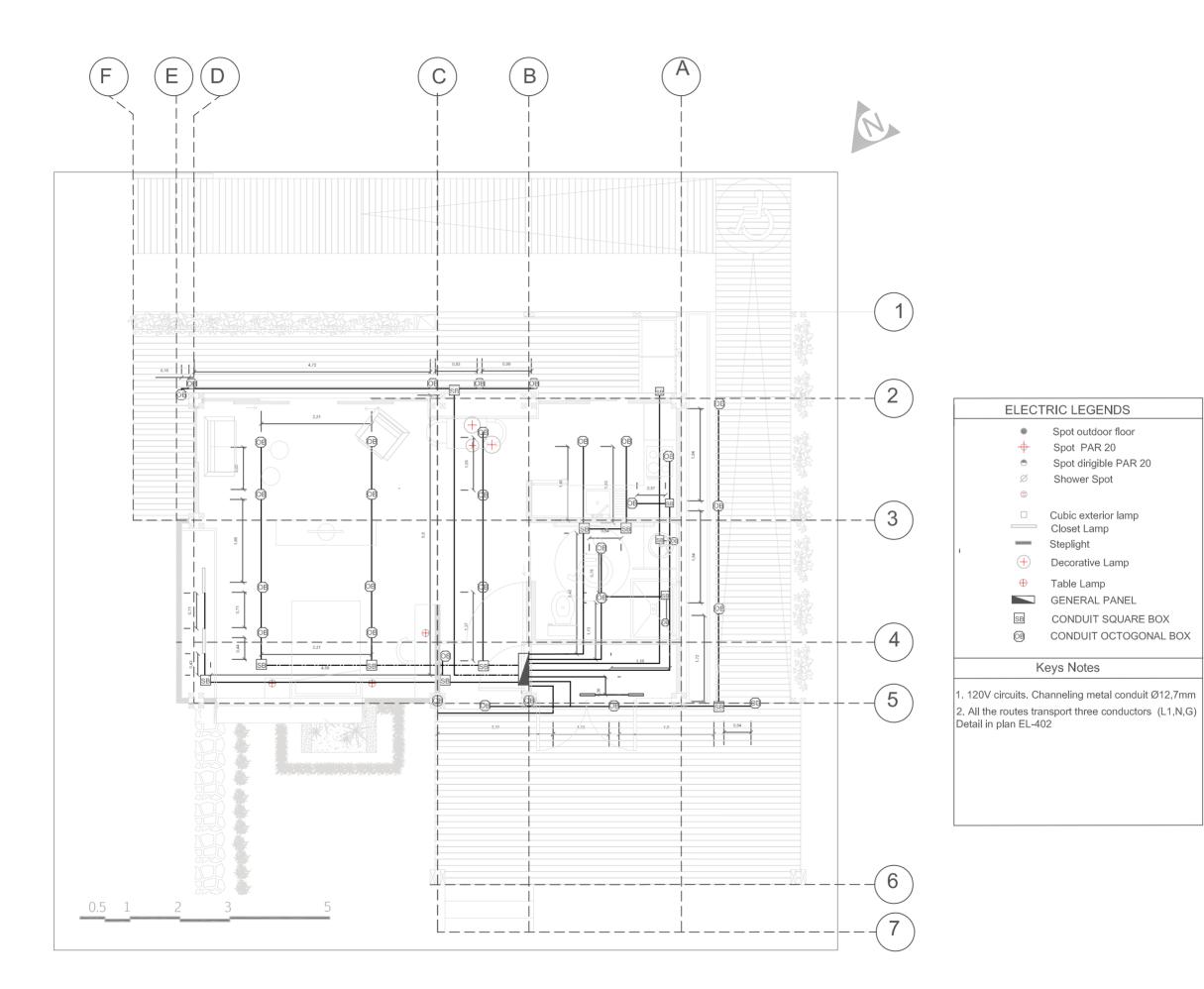
Sheet title

AC Layout

Content: Machine Room

Scale: 1:100 Date:03/11/2014

EL-604 Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

ELECTRIC LEGENDS

Spot outdoor floor Spot PAR 20 Spot dirigible PAR 20 Shower Spot

Cubic exterior lamp Closet Lamp

Decorative Lamp

CONDUIT OCTOGONAL BOX

Steplight

Table Lamp GENERAL PANEL CONDUIT SQUARE BOX

Keys Notes



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Sheet title

AC Layout

Content: Lighting

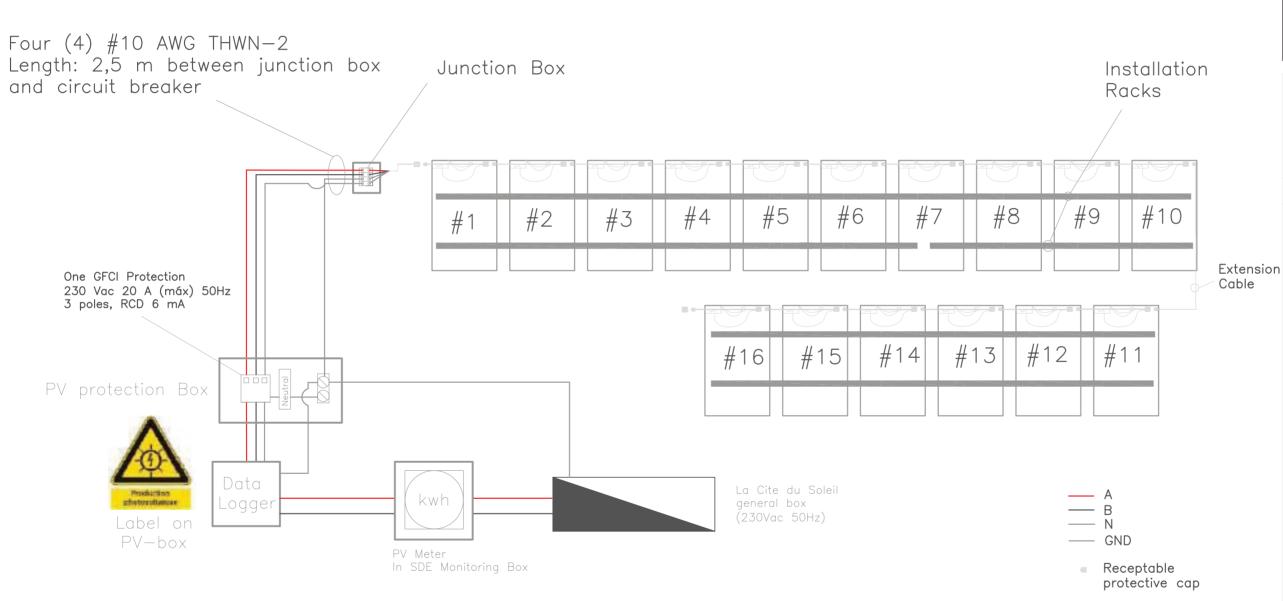
Scale: 1:75

Date: 03/11/2014

EL-605 Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

thick .

Eng. Fabricio Bonilla Pacheco Professional ID: MI-25961

Made by: Department of Engineering

Sheet title

Photovoltaic System: General

Content: General Configuration
Details

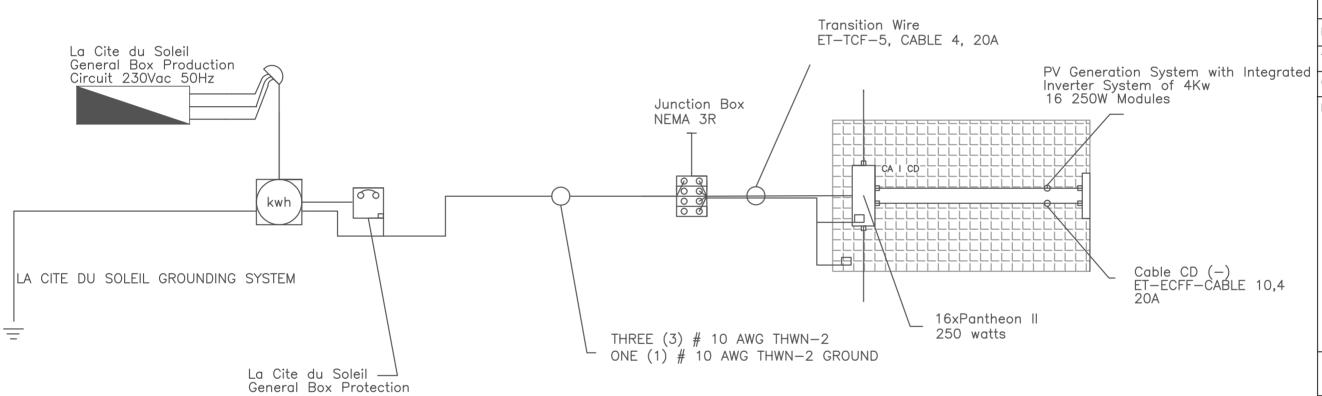
Scale: 1:75

Date: 03/11/2014

Code: **PV-001**







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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Made by: Department of Engineering

Sheet title

Photovoltaic System: General

Content: One Line Diagram

Scale: 1:50

Date: 03/11/2014

Code: PV-002





Proyect: Trópika

57,5

40

Team: Tec Team

Country: Costa Rica

Professional seal:



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Sheet title

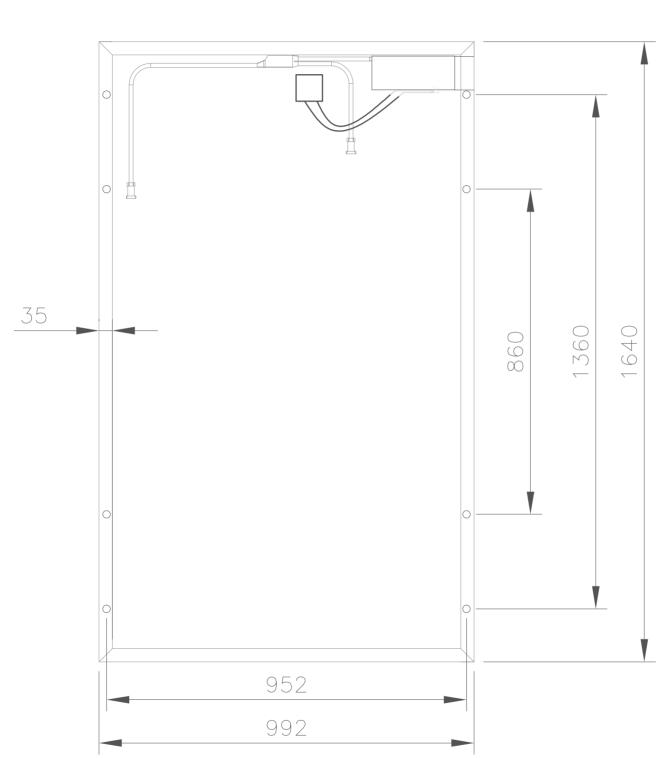
Photovoltaic System: General

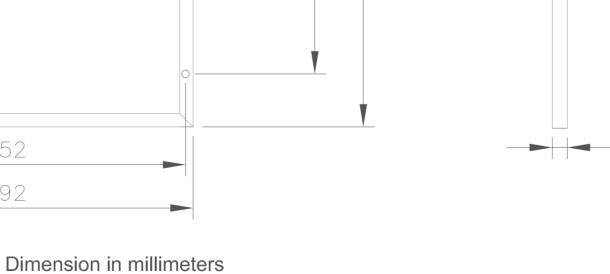
Content: PV Panel Dimensions

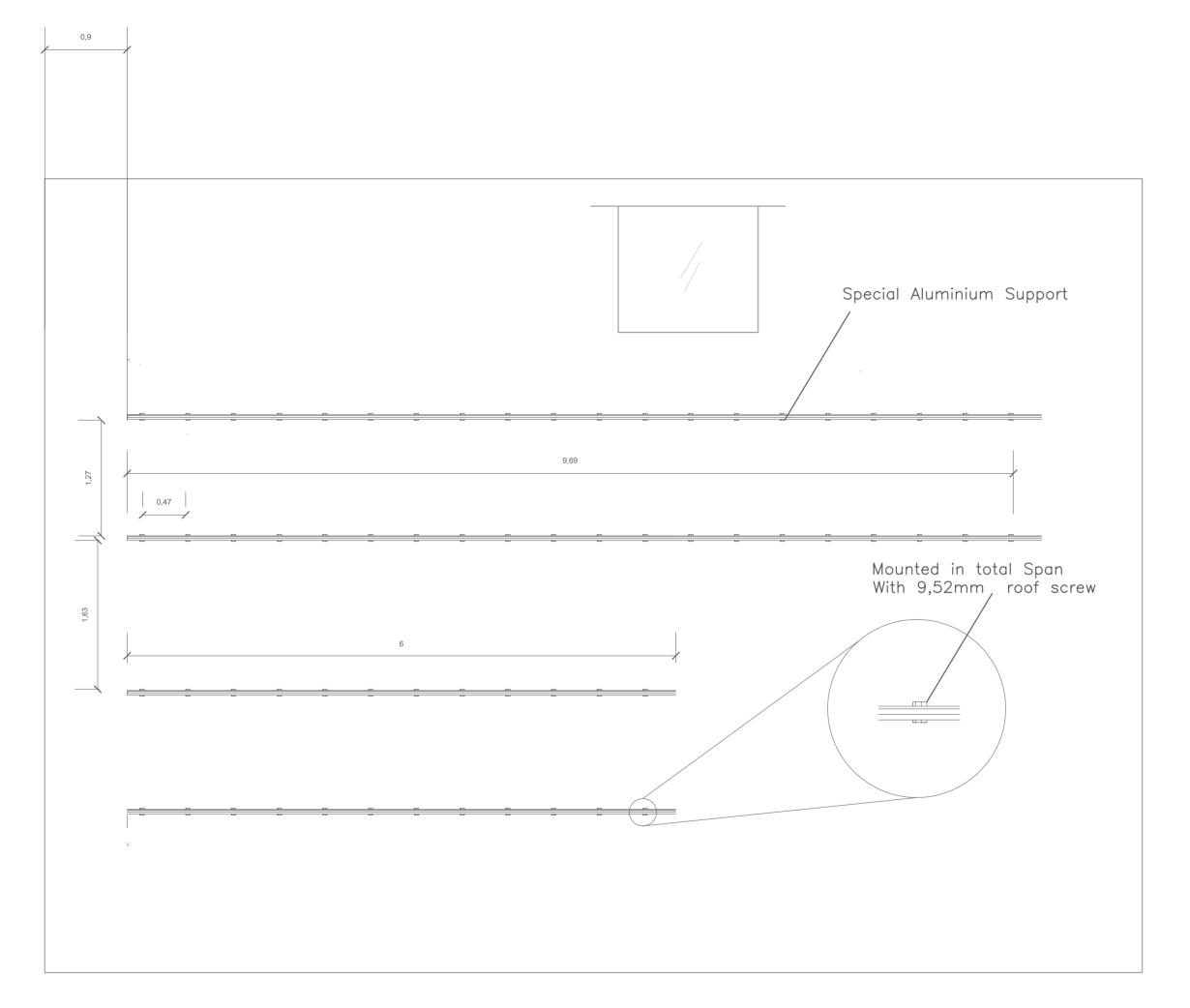
Scale: 1:10

Date: 03/11/2014

PV-003 Code:











Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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Sheet title

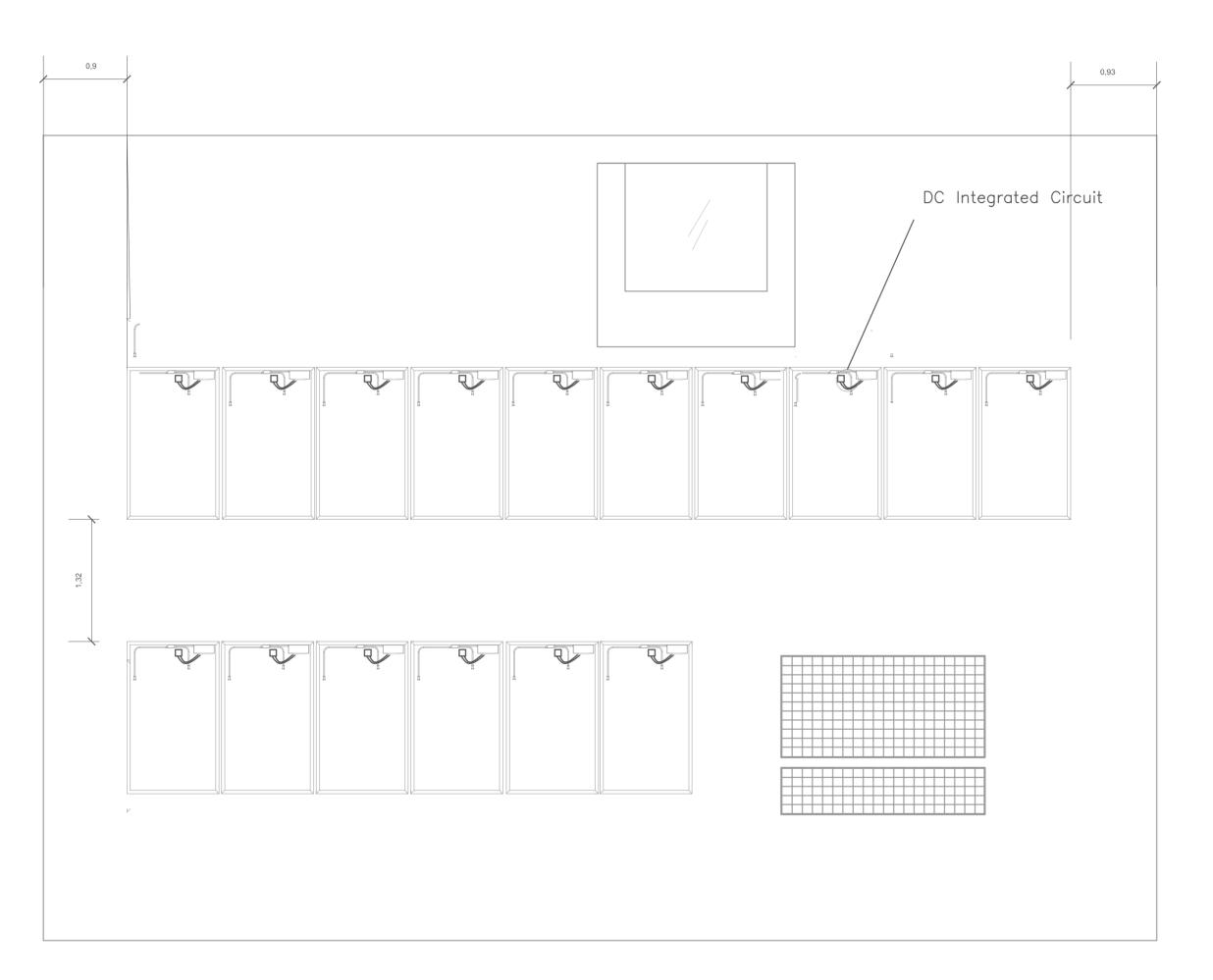
Photovoltaic System: General

Content: PV Panel Mounting Structure

Scale: 1:50

Date: 03/11/2014

Code: PV-004







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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Sheet title

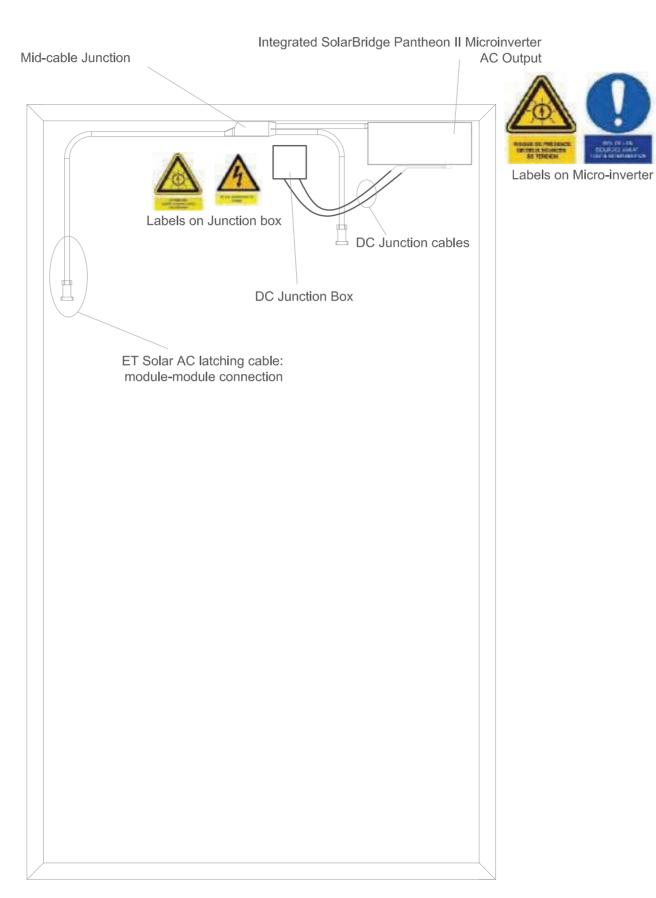
Photovoltaic System: DC Circuits

Content: System DC Circuit

Scale: 1:50

Date: 03/11/2014

Code: PV-011







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Eng. Fabricio Bonilla Pacheco Professional ID: MI-25961

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Sheet title

Photovoltaic Systems: DC Circuits

Content: PV Panel DC Circuits

Scale: 1:10

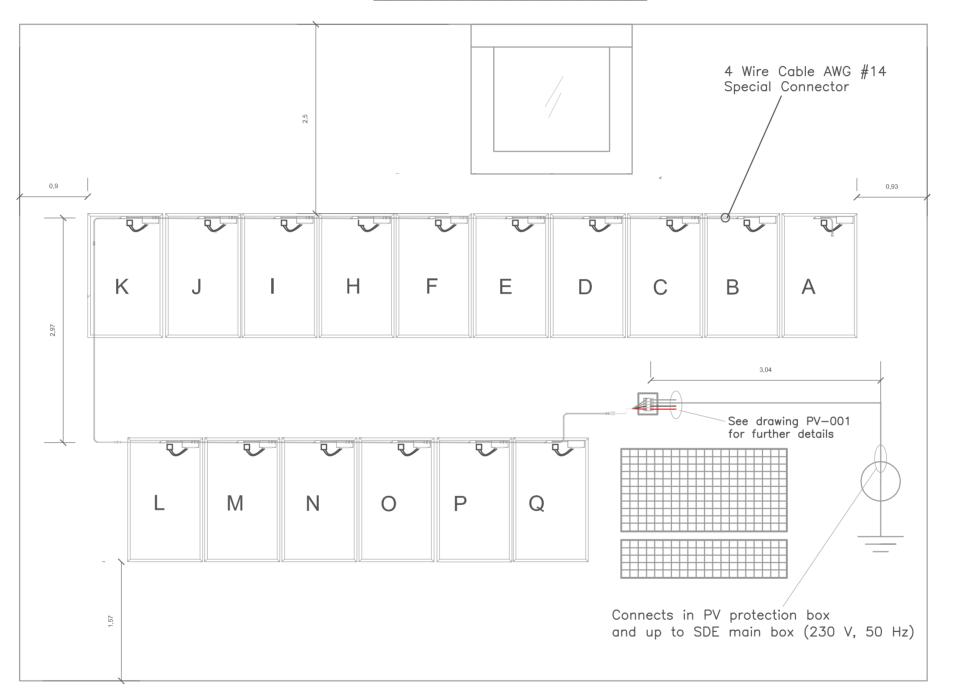
Date: 03/11/2014

Code: **D**

PV-012

PANEL CONNECTION SCHEDULE









Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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Sheet title

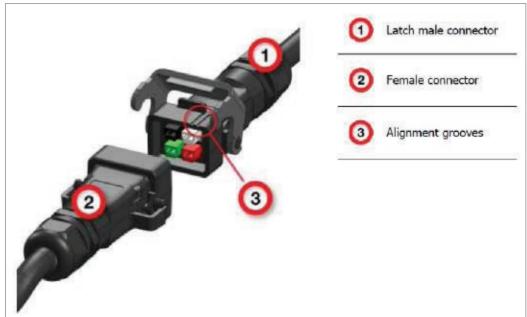
Photovoltaic System AC Circuit

Content: AC circuit

Scale: 1:50

Date: 03/11/2014

Code: PV-021









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Country: Costa Rica

Professional seal:



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Sheet title

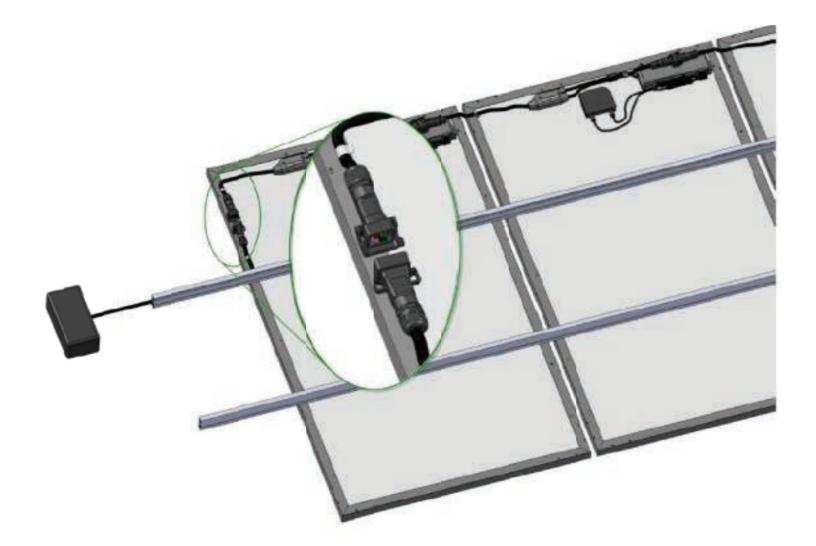
Photovoltaic System: AC Circuit

Content: AC Details Conectors

Scale: 1:100

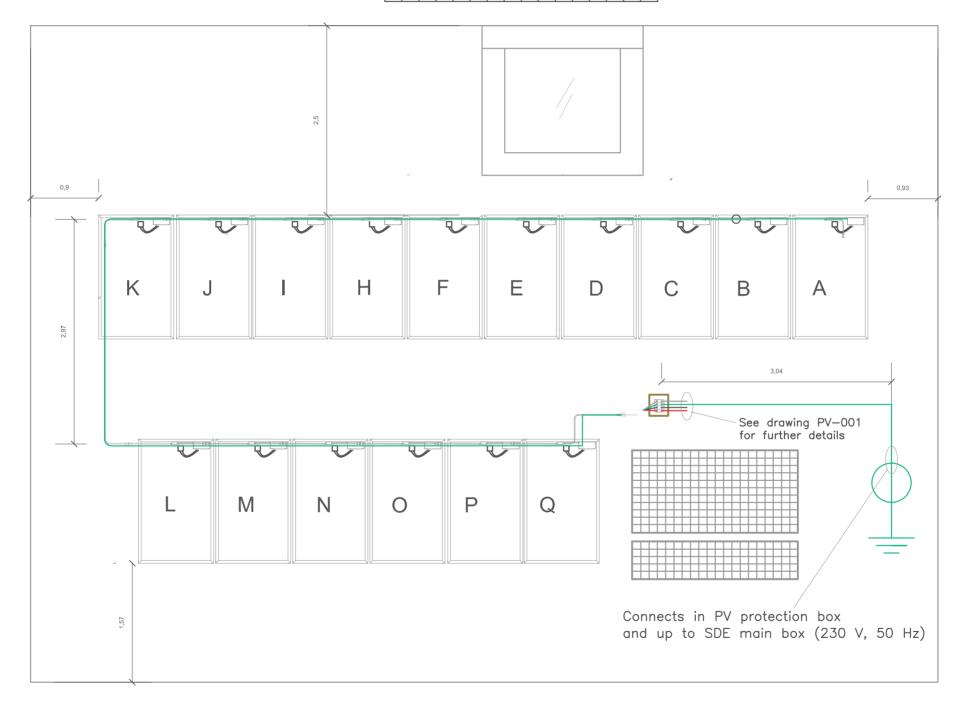
Date: 03/11/2014

PV-022 Code:



PANEL CONNECTION SCHEDULE

Position 1 2 3 4 5 6 7 8 9 10111213141516 A B C D E F G H I J K L M N N O







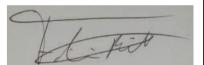
Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



Eng. Fabricio Bonilla Pacheco Professional ID: MI-25961

Made by: Department of Engineering

Sheet title

PV Groundig System

Content: PV Grounding Diagram

Scale: 1:50

Date: 03/11/2014

Code: PV-031



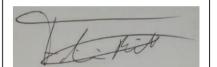


Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:



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Sheet title

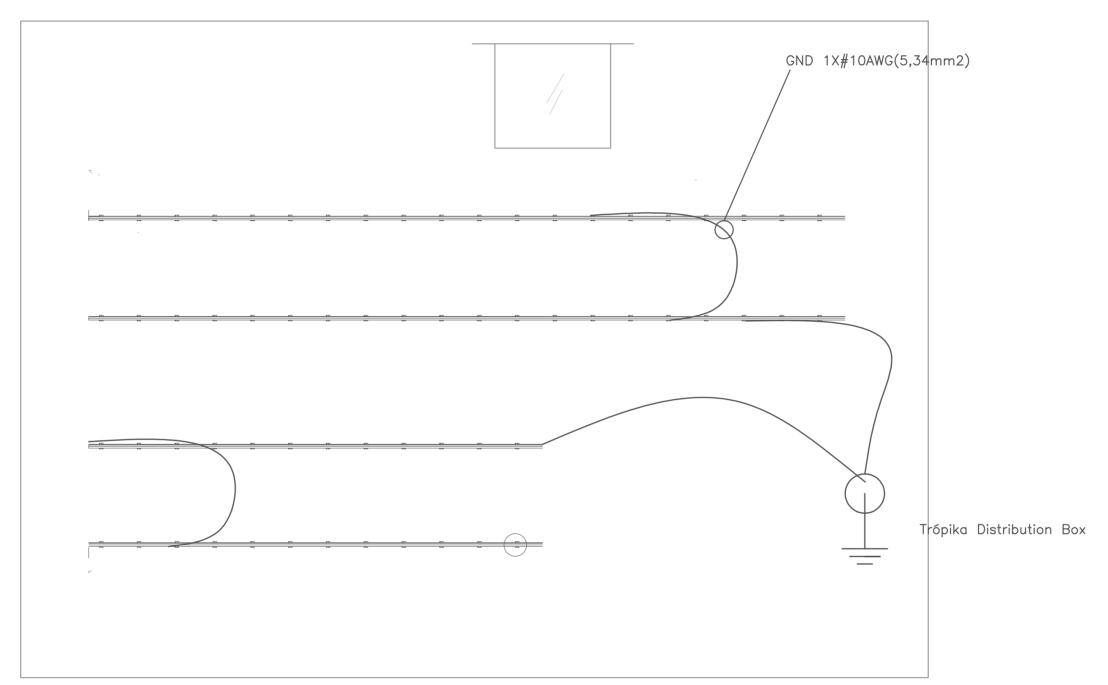
PV Grounding System

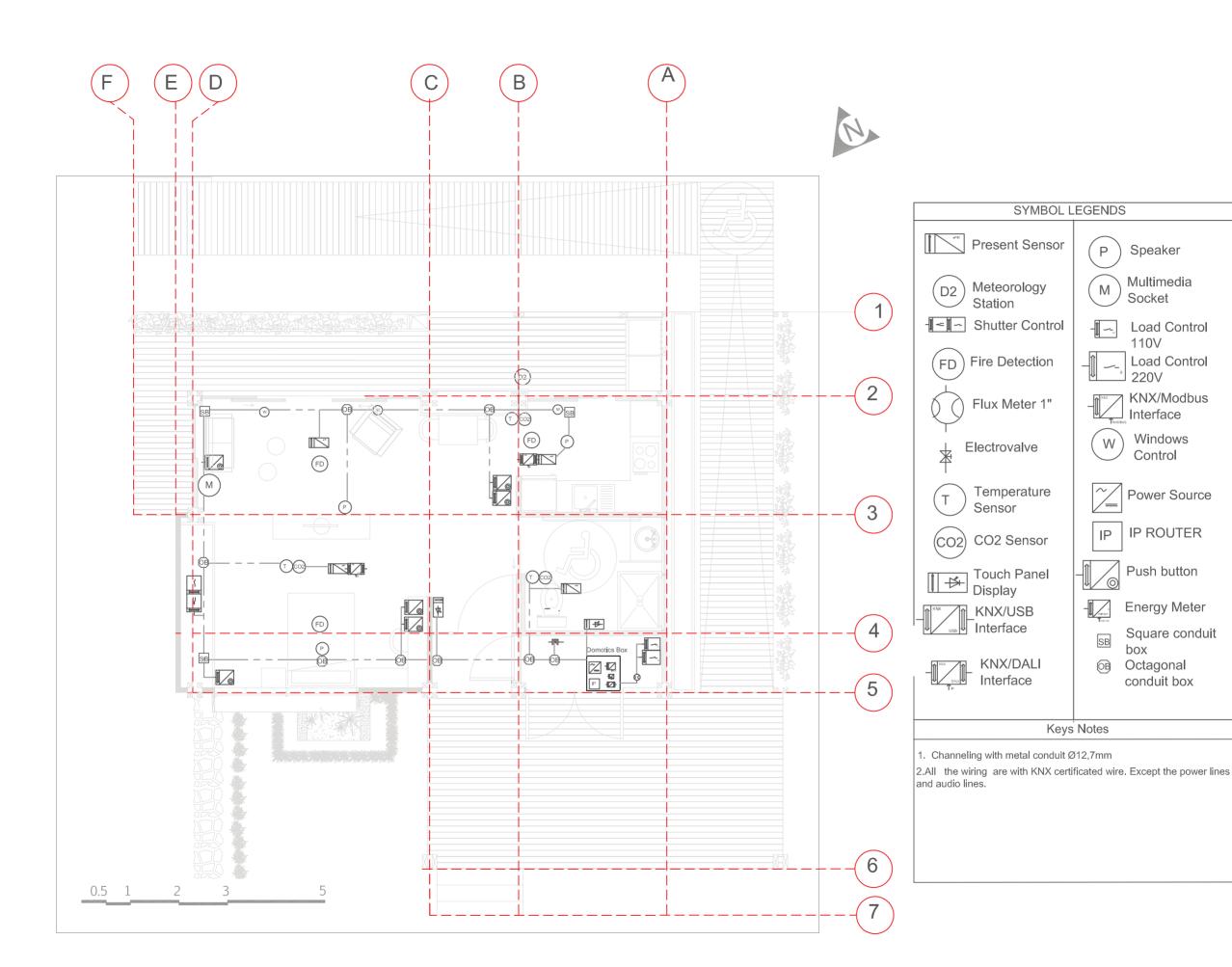
Content: Structure Grounding
System

Scale: 1:50

Date: 03/11/2014

Code: PV-032









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Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of Engineering

Sheet title

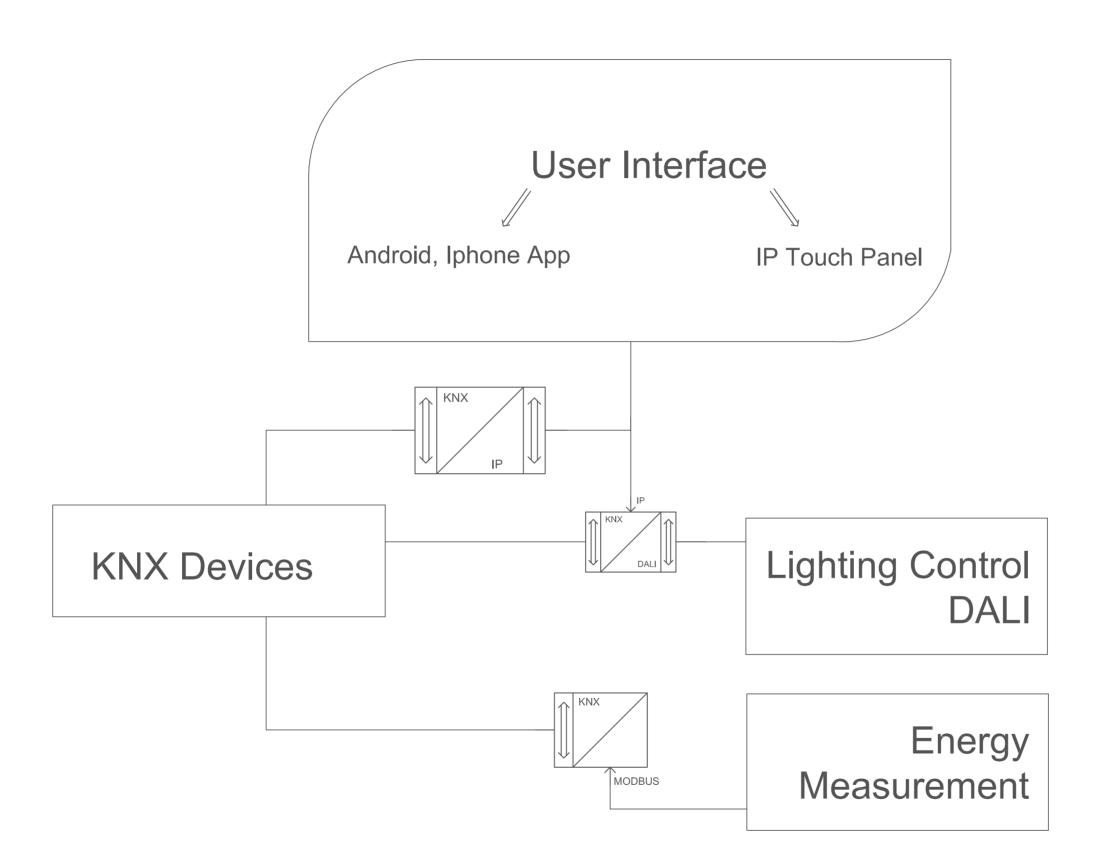
Wiring Plan

Content: Wiring Plan Diagram

Scale: 1:75

Date:03/11/2014

Code: BAS-001







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of Engineering

Sheet title

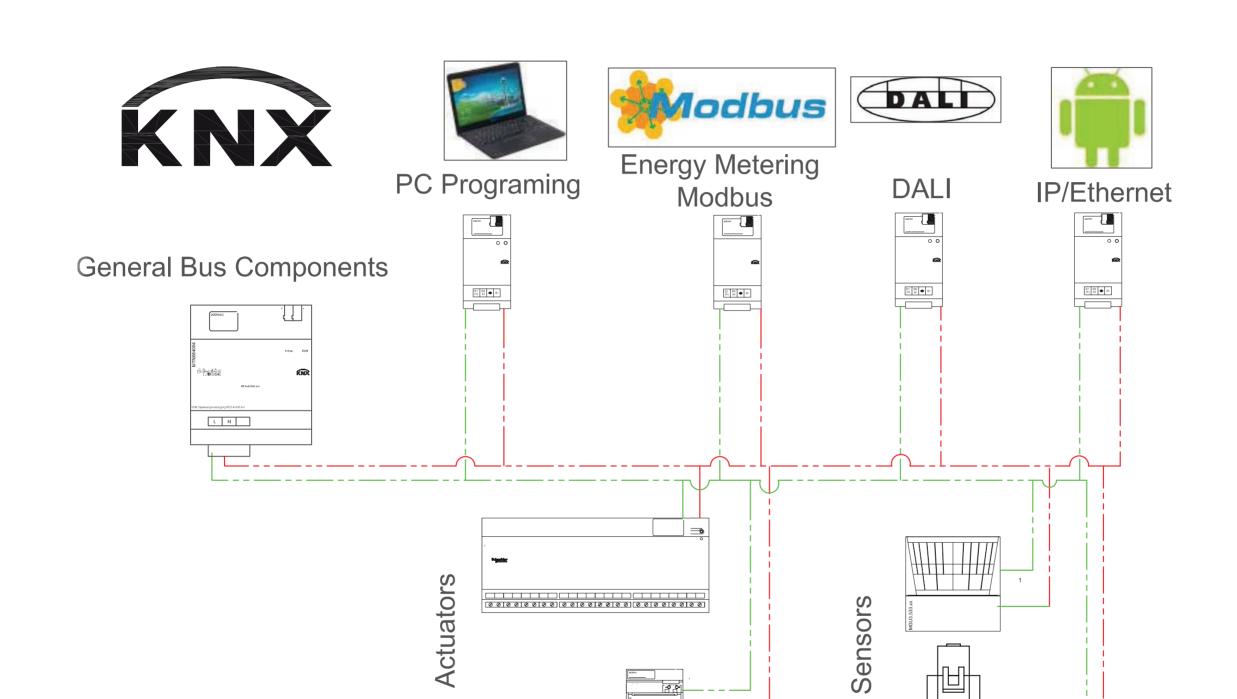
Schematic Diagram

Content: Schematic Diagram General

Scale: 1:75

Date:03/11/2014

Code: BAS-101



*** 1 6 6





Deliverable #7
Project Drawings

Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of Engineering

Sheet title

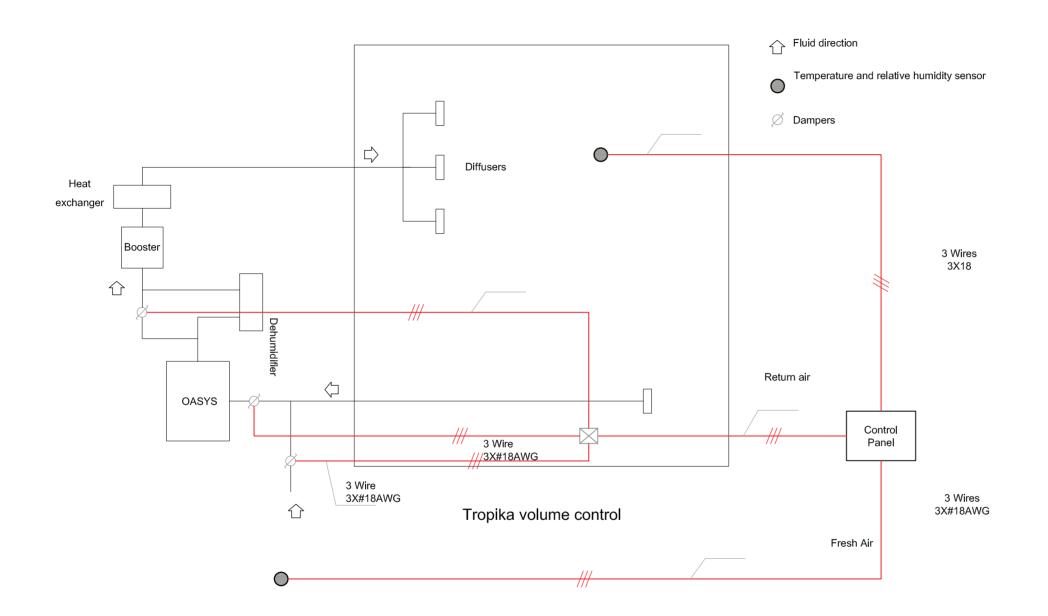
Schematic Diagram

Content: Schematic Diagram
Bus Representation

Scale: 1:75

Date: 03/11/2014

BAS-102 Code:







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of Engineering

Sheet title

Schematic Diagram

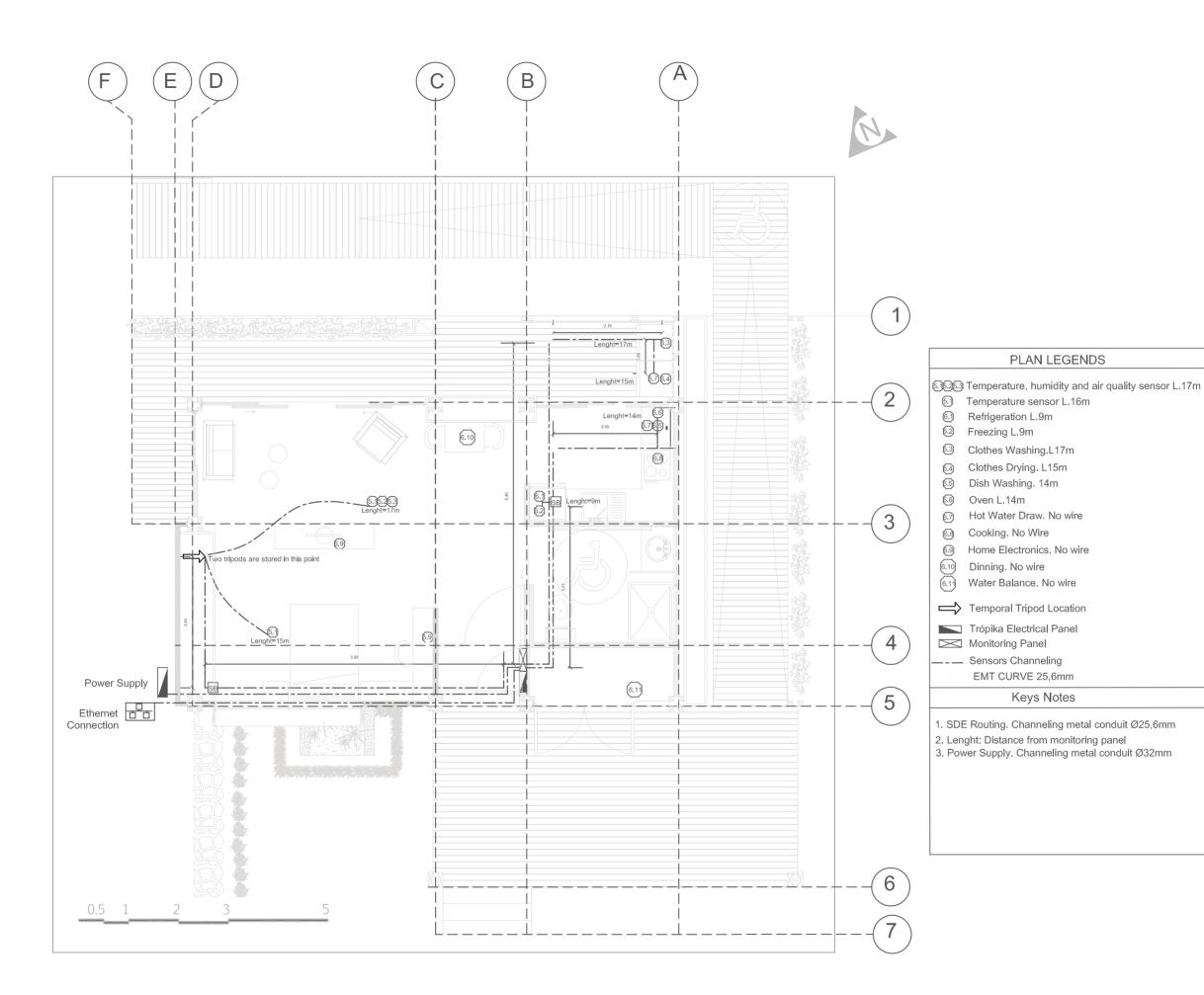
Content: Schematic Diagram General HVAC Control

Scale: 1:75

Date: 03/11/2014

Code:

BAS-103







Proyect: Trópika

PLAN LEGENDS

Keys Notes

Tec Team

Country: Costa Rica

Instrumentation Contact:
Hugo Sánchez O.

Made by: Department of Engineering

Sheet title

General Monitoring

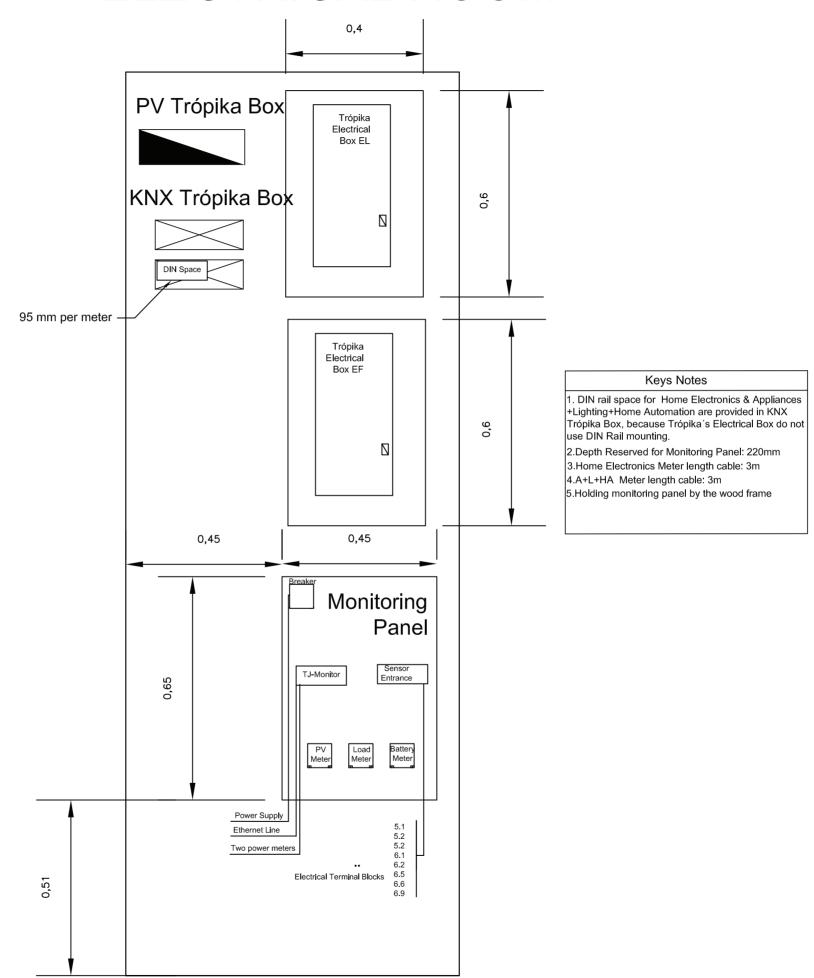
Content: General Monitoring Diagram

Scale: 1:75

Date: 03/11/2014

ID-001 Code:

ELECTRICAL ROOM







Deliverable #7 Project Drawings

Proyect: Trópika

Tec Team

Country: Costa Rica

Instrumentation Contact: Hugo Sánchez O.

Made by: Department of Engineering

Sheet title

Monitorig panel room

Content: Monitorig panel room Diagram

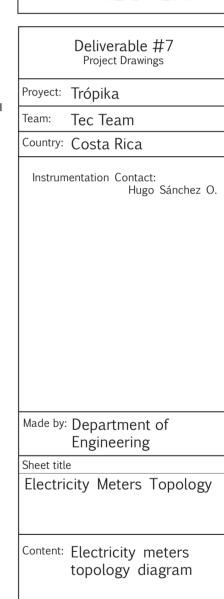
Scale: 1:10

Date: 03/11/2014

ID-002 Code:



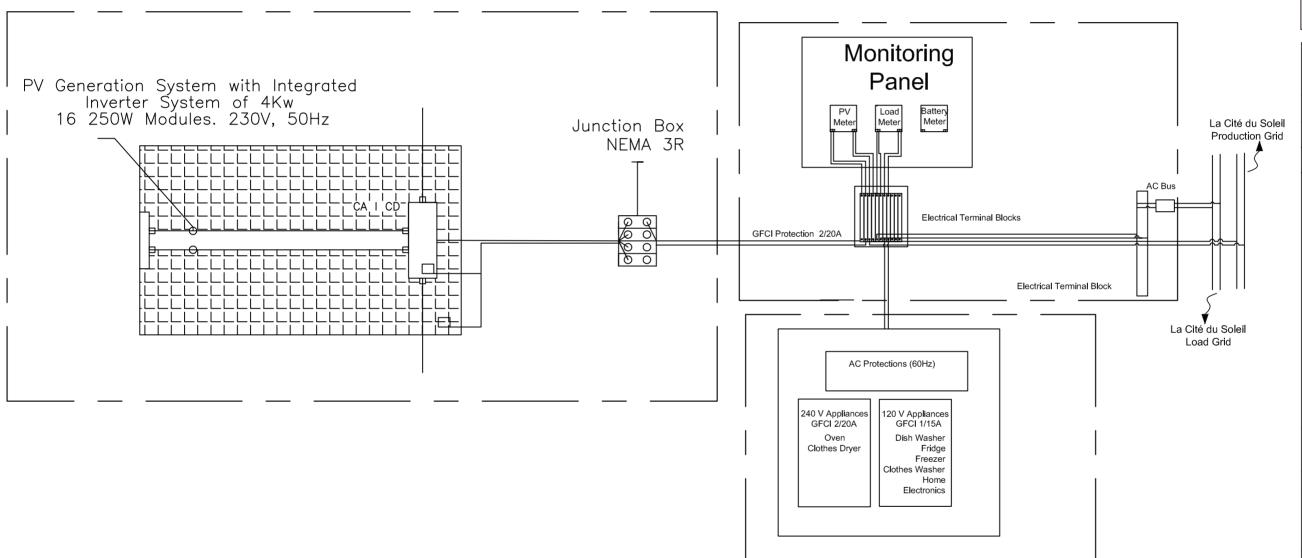


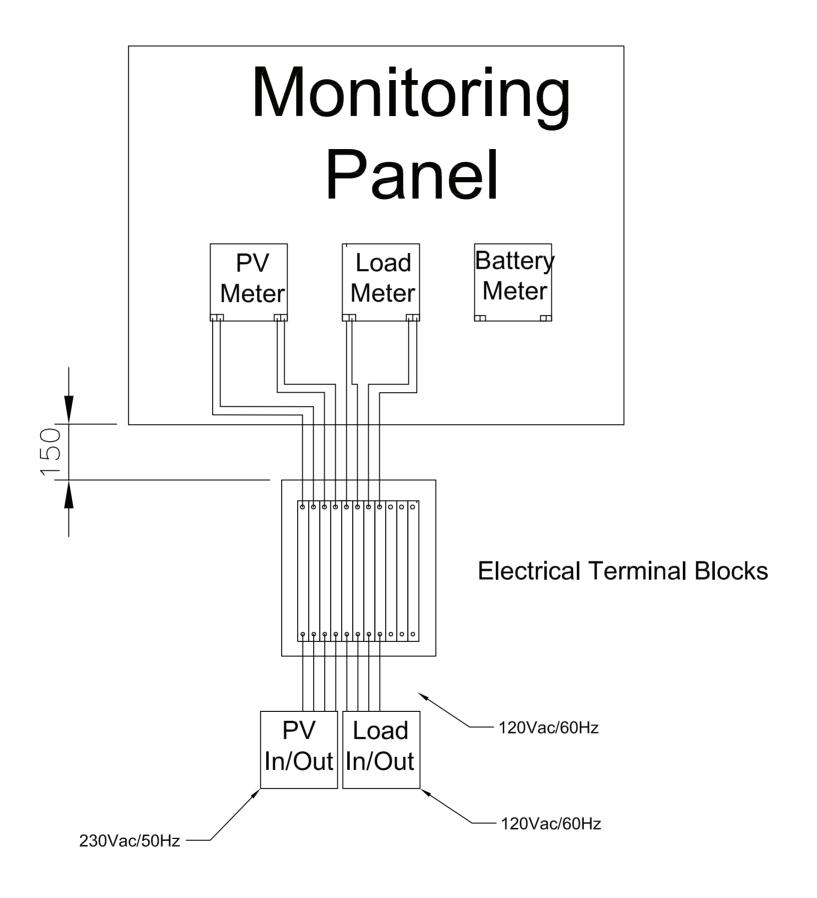


Scale: N.A

Date: 03/11/2014

Code: ID-003





*Dimension in millimeters





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Instrumentation Contact:
Hugo Sánchez O.

Made by: Department of Engineering

Sheet titl

Electricity Meters Connection

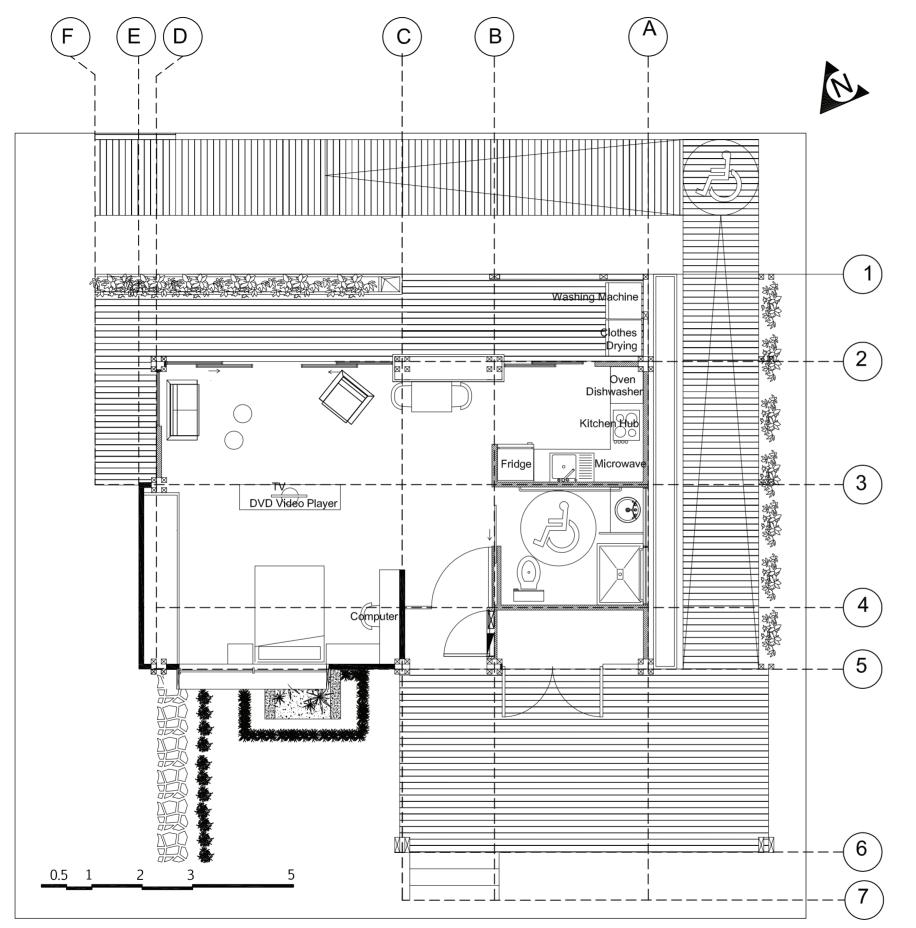
Content

Electricity Meters Connection Diagram

Scale: 1:10

Date: 03/11/2014

Code: ID-004







Proyect: Trópika

Tec Team

Country: Costa Rica

Instrumentation Contact:
Hugo Sánchez O.

Appliances	Brand	Model
Frigde/ Freezer	Samsung	RT32FARLDSL
DVD Player	Samsung	HT E3500ZP
TV	Samsung	UN40F5500AFXZP
Washing Machine	Frigidaire	FFFS5115PA
Clothes Dryer	Frigidaire	FFFSG5115PA
Oven	Bosch	HBN42S350E
Microwave	Bosch	HBC86E650N
Dish washer	Bosch	SHX4AP05UC
Kitchen Hub	Summit Appliance	SINC2220
PC	ASUS	X75a

Keys Notes

2. L: Distance from monitoring panel

1. SDE Routing. Channeling metal conduit Ø25,6mm

Made by: Department of Engineering

Sheet title

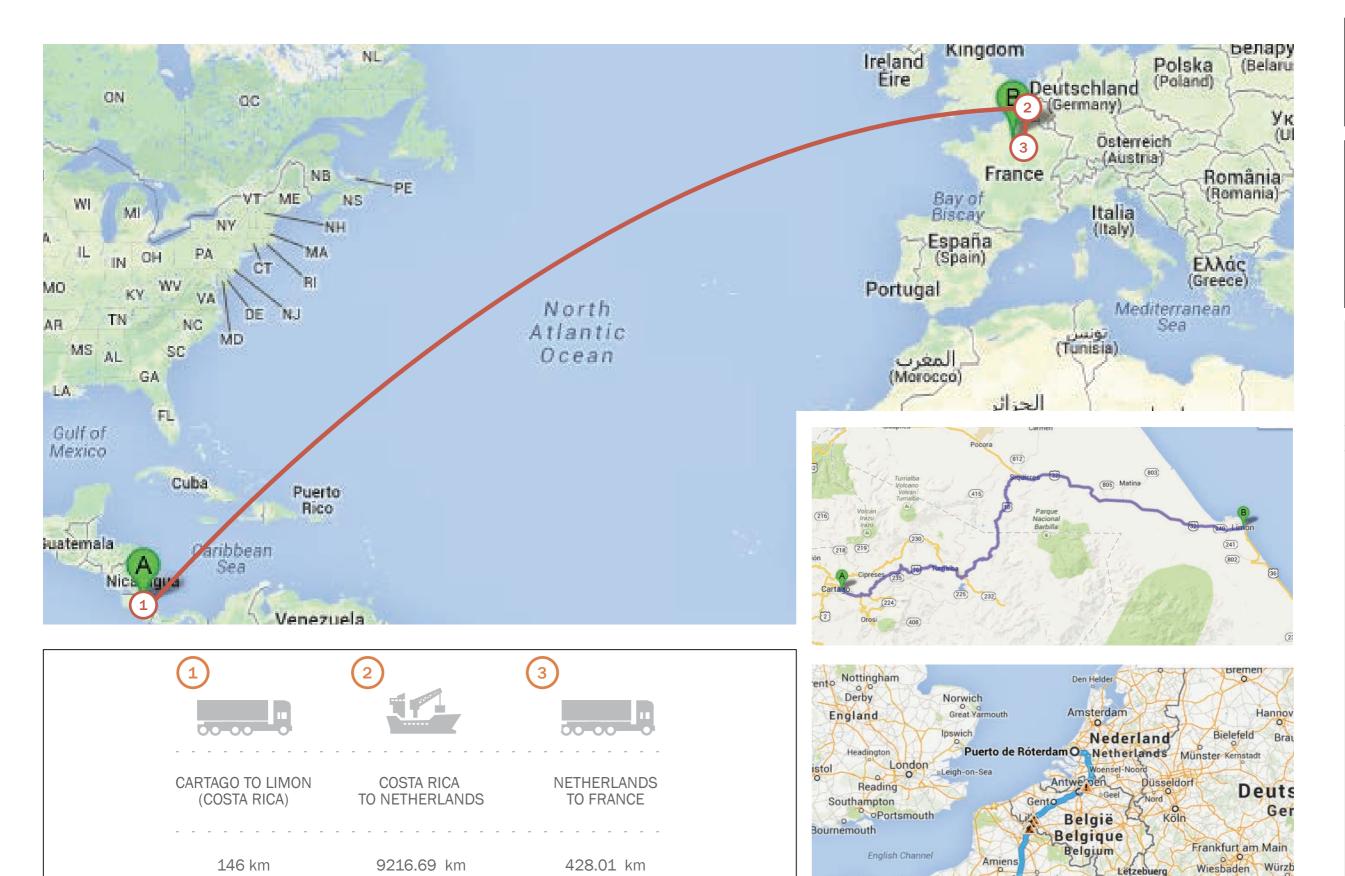
House Appliances

Content: House Appliances Diagram

Scale: 1:75

Date: 03/11/2014

ID-005 Code:



05

HOURS

06

HOURS

14 DAYS





Deliverable #7
Project Drawings

Proyect: Trópika

eam: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of engineering

Sheet title

Outside Logistics

Content:

Mannheim

Karlsruhe Stuttgart

Strasbourg

o Nancy

Le Havre

Versailles (

Orléans

Jersey

Saint-Malo Saint-Brieuc

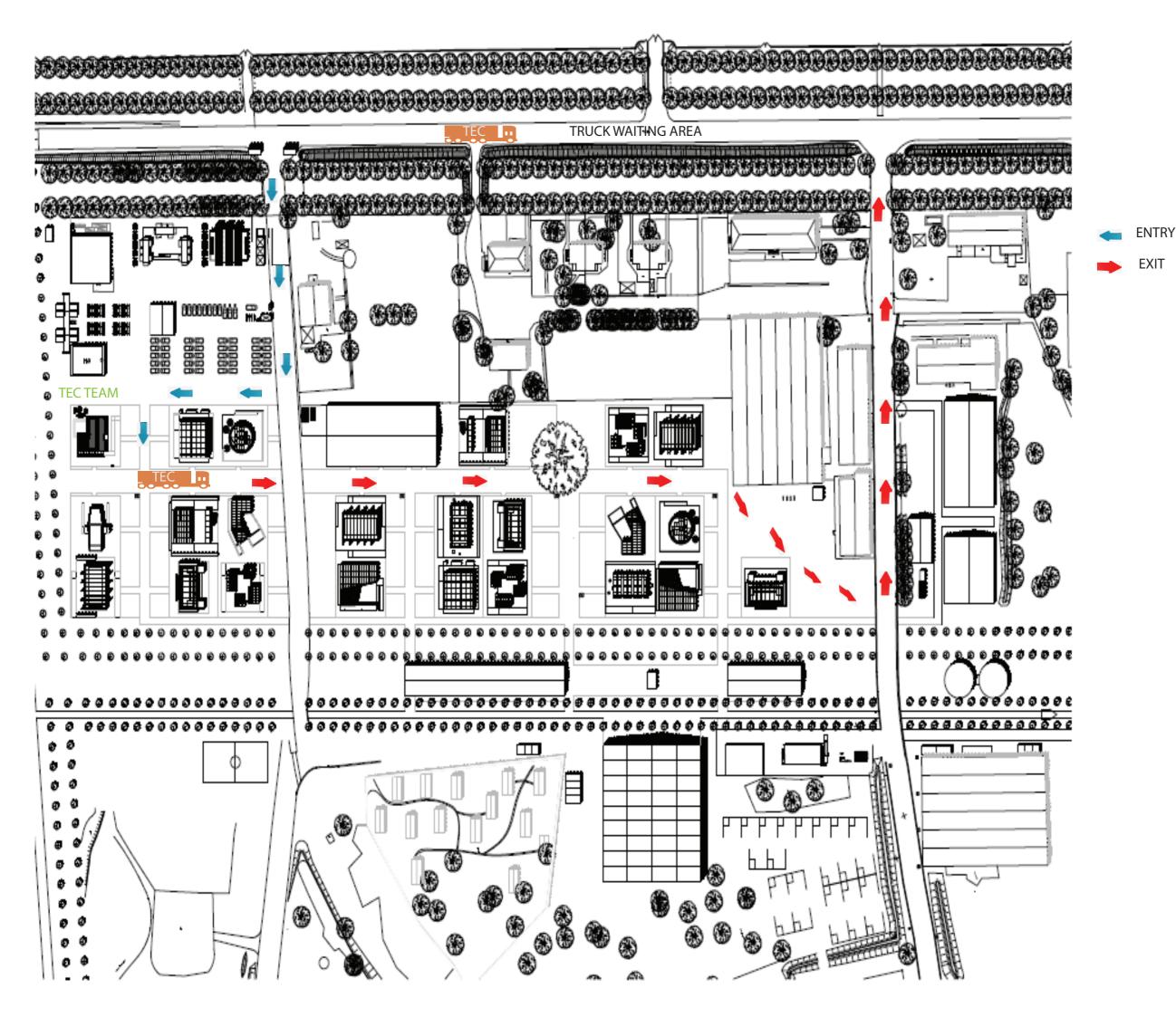
Rennes

Nantes

Scale: 1:20

Date: 11/3/2014

Sode: SO-001







royect: Trópika

m: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of engineering

Sheet title

Inside Logistics

Content: La Cité du Soleil

Scale: 1:20

Date: 11/3/2014

Code: SO-101



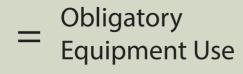
















Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

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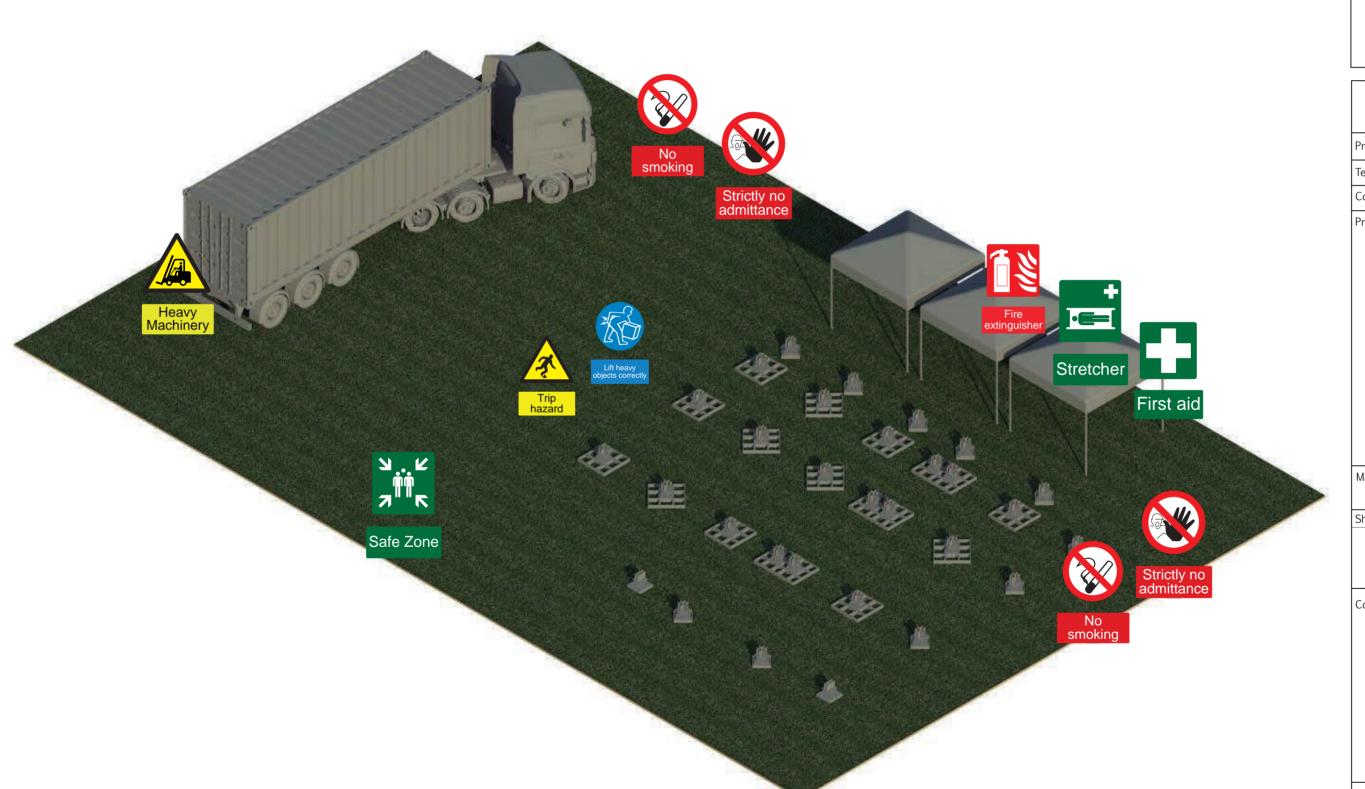
Safety sign posting

Content: Safety sign posting during the assembly and disassembly

Scale:

Date:11/3/2014

HS-401 Code:

















Obligatory **Equipment Use**





Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of H S

Sheet title

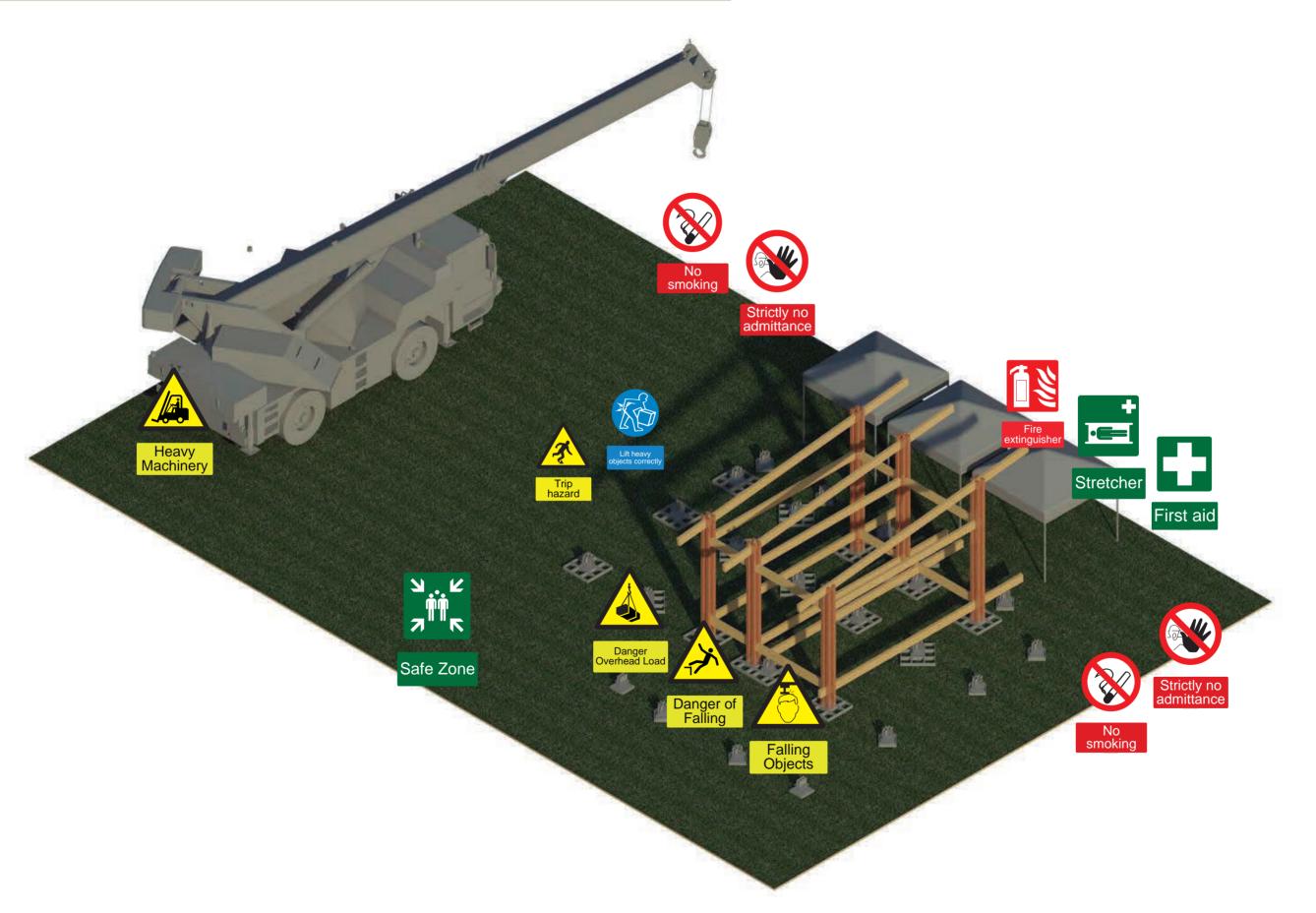
Safety sign posting

Content: Safety sign posting during the assembly and disassembly

Scale:

Date:11/3/2014

HS-402























TEC TEAM

Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of H S

Sheet title

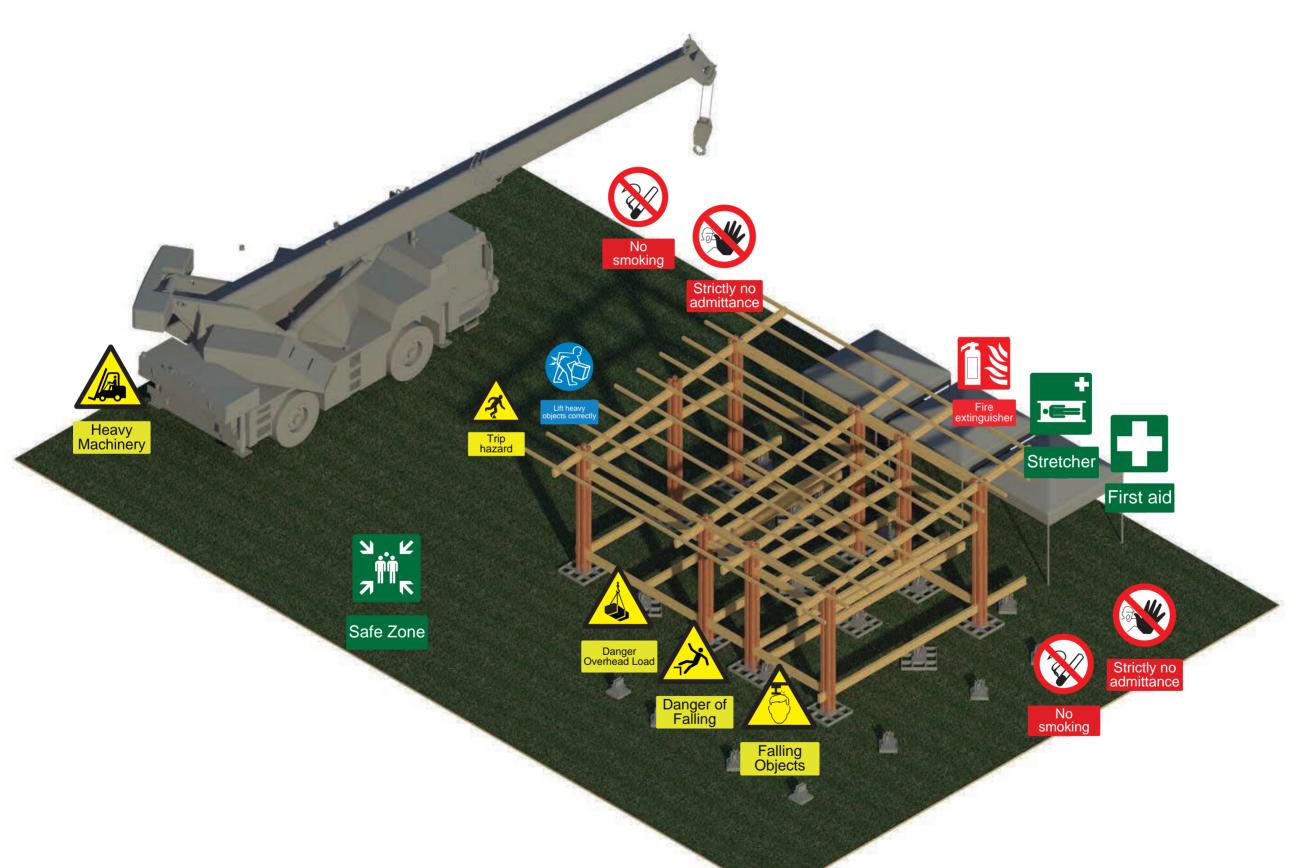
Safety sign posting

Content: Safety sign posting during the assembly and disassembly

Scale:

Date:11/3/2014

HS-403 Code:

















Deliverable #7
Project Drawings

Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of H S

Sheet title

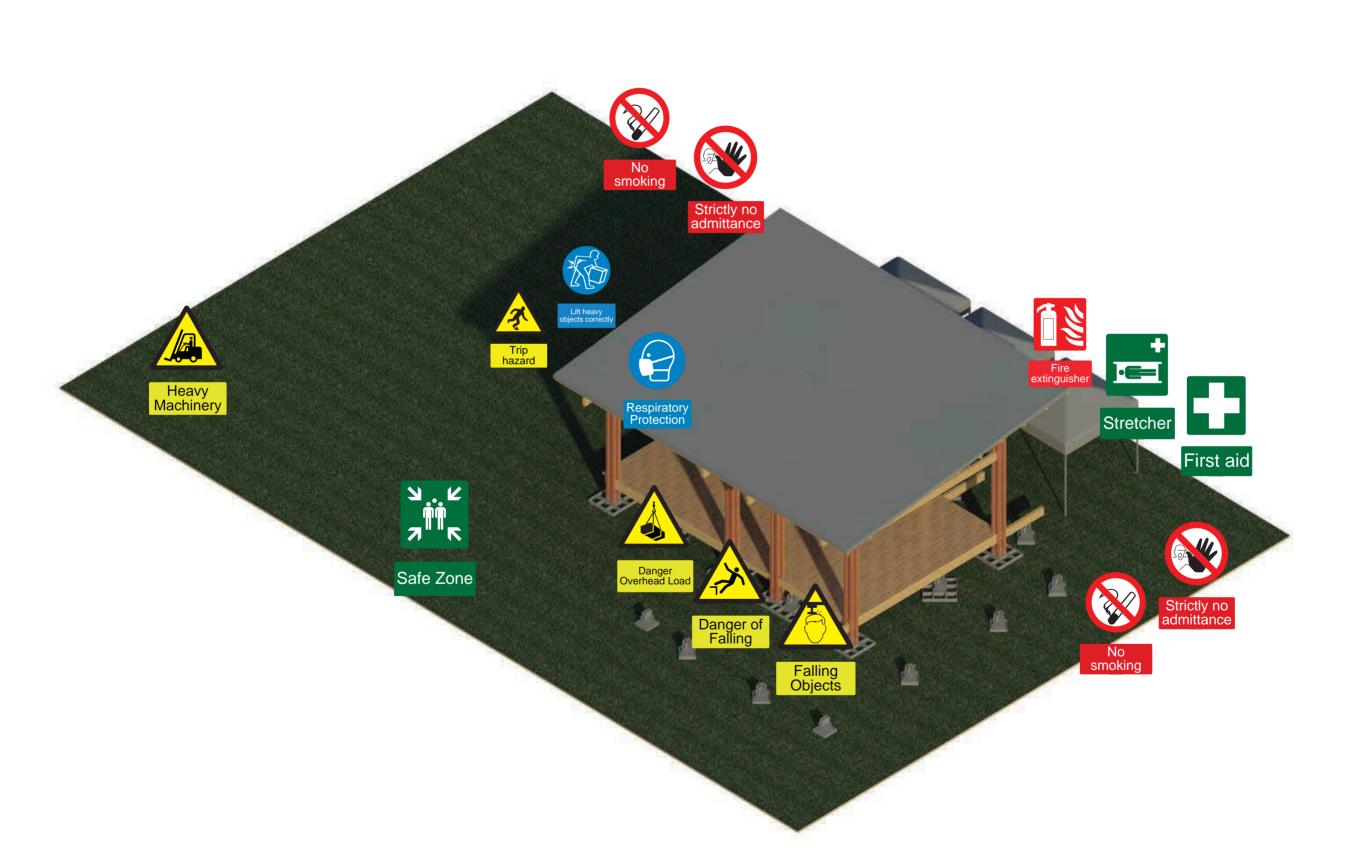
Safety sign posting

Content: Safety sign posting during the assembly and disassembly

Scale:

Date:11/3/2014

HS-404 Code:



















Deliverable #7
Project Drawings

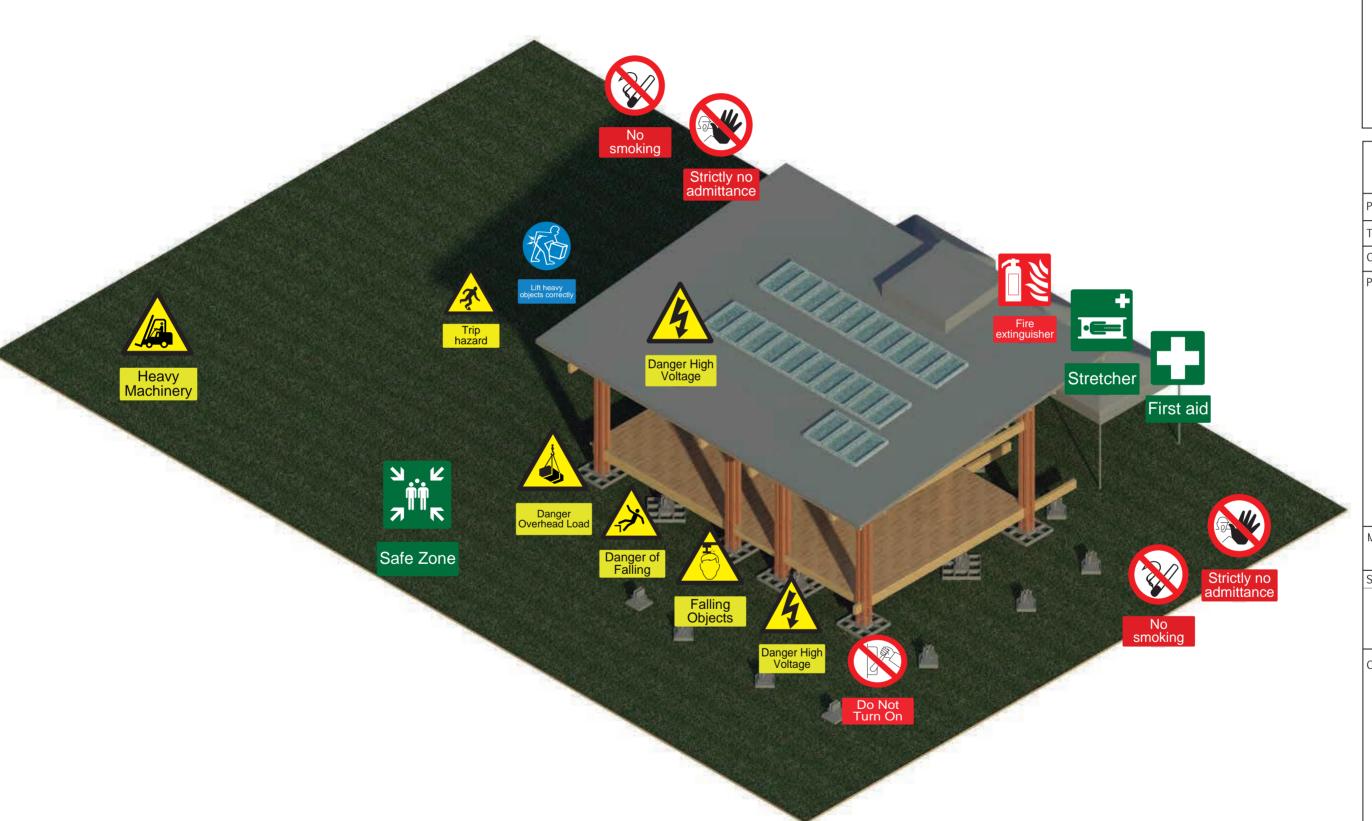
Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of H S Safety sign posting Content: Safety sign posting during the assembly and disassembly Date:11/3/2014 Scale: HS-405



















Deliverable #7
Project Drawings

Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of H S

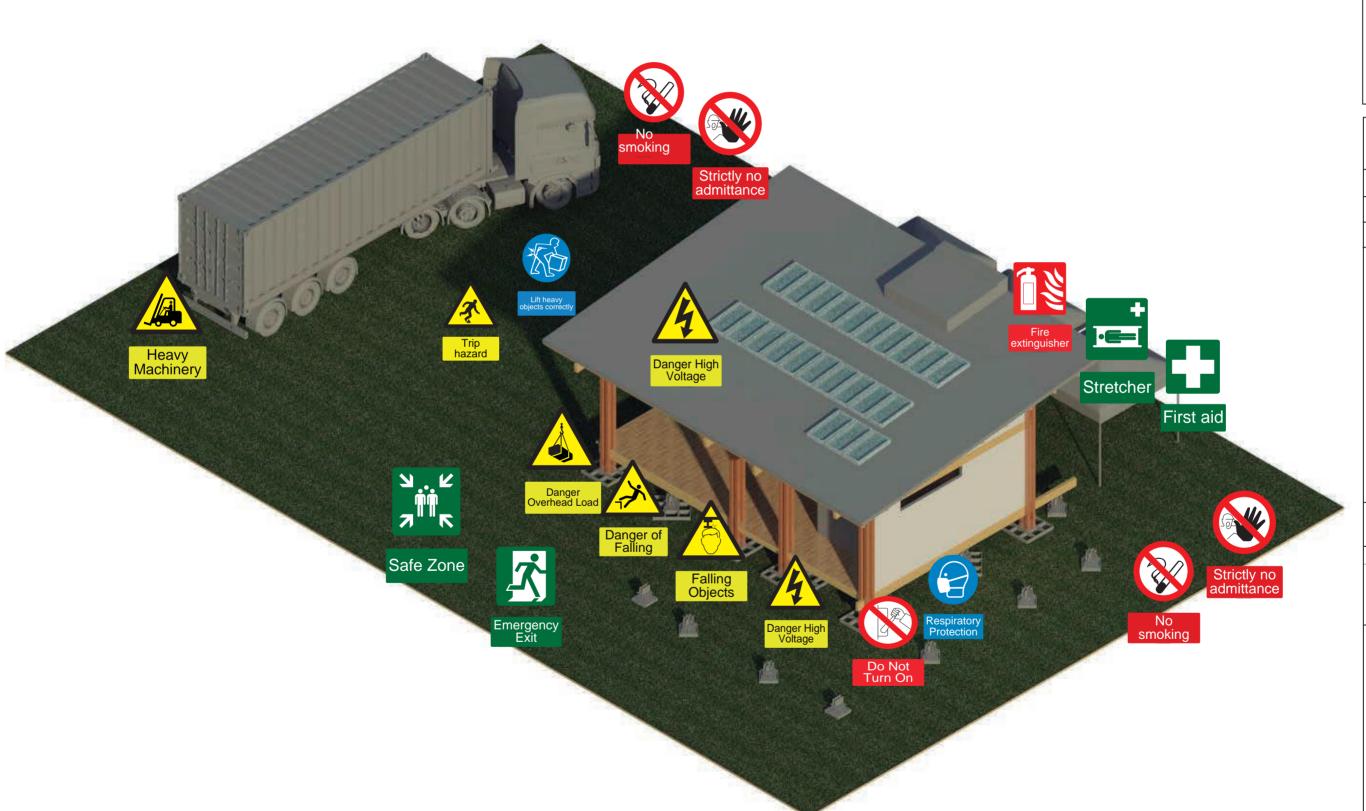
Safety sign posting

Content: Safety sign posting during the assembly and disassembly

Code:

Date:11/3/2014

HS-406



















Deliverable #7
Project Drawings

Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of H S

Sheet title

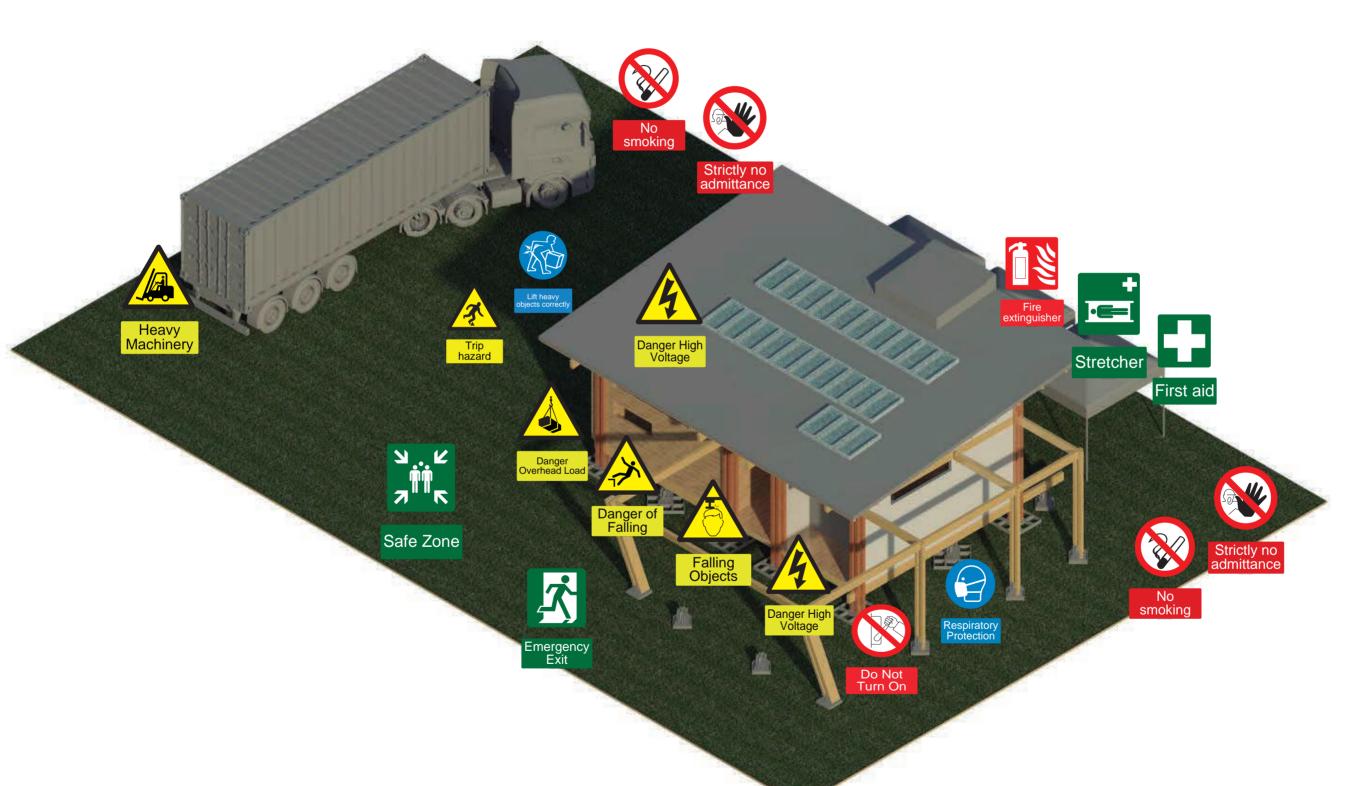
Safety sign posting

Content: Safety sign posting during the assembly and disassembly

Scale:

Date:11/3/2014

HS-407 Code:

















Deliverable #7
Project Drawings

Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of H S

Sheet title

Safety sign posting

Content: Safety sign posting during the assembly and disassembly

Scale:

Date:11/3/2014

HS-408 Code:





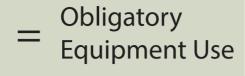
















Proyect: Trópika

Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of H S

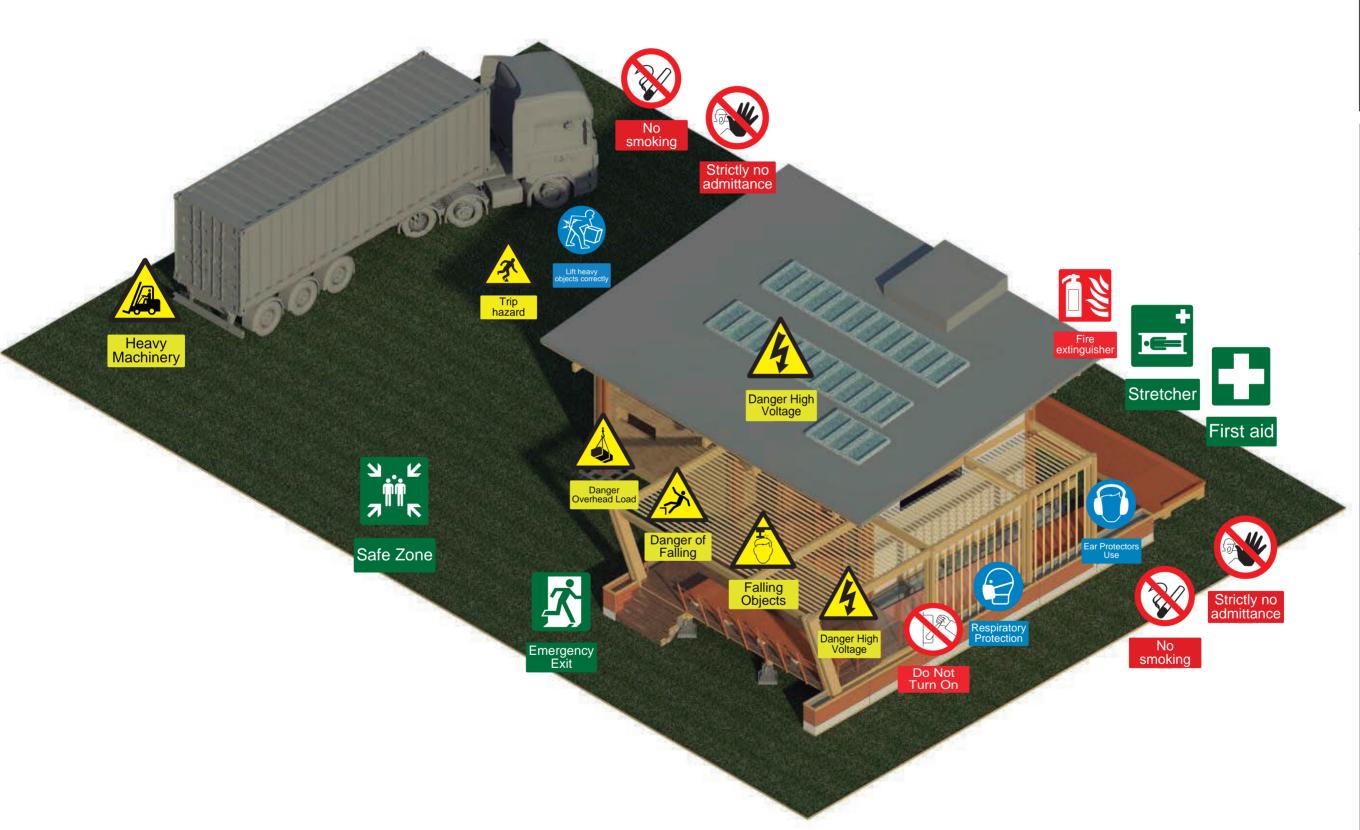
Sheet title

Safety sign posting

Content: Safety sign posting during the assembly and disassembly

Date:11/3/2014

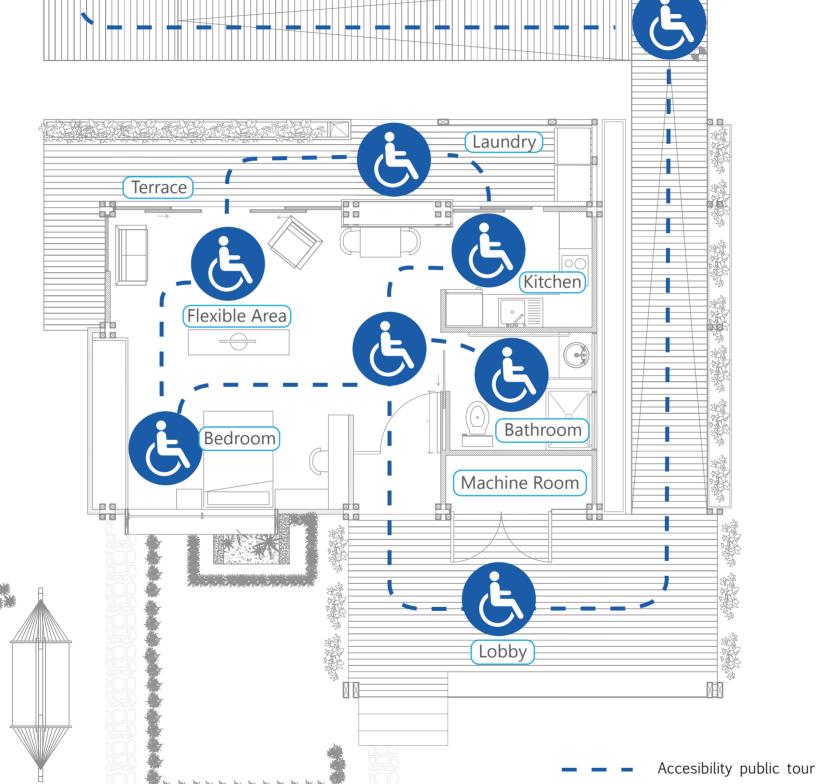
HS-409





Entrance









Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of Administration and Design

Sheet title

Public tour

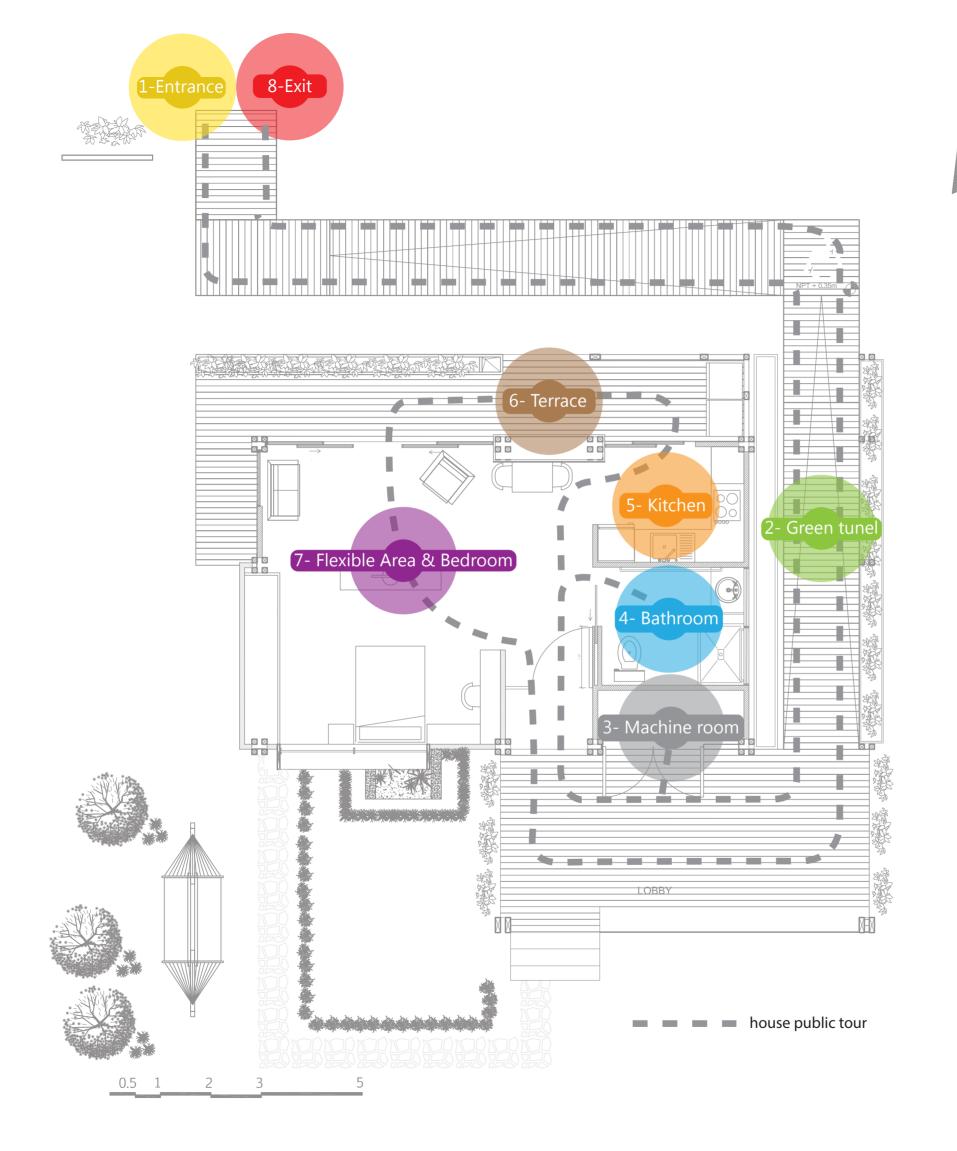
Content: Site Accessibility

Scale: 1:100

Turning radius (1.2 < 1.5m)

Date:11/3/2014

Code: PT-001







Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of Administration and Design

Sheet title

Public tour

Content: House Tour Floor Plan

Scale: 1:100

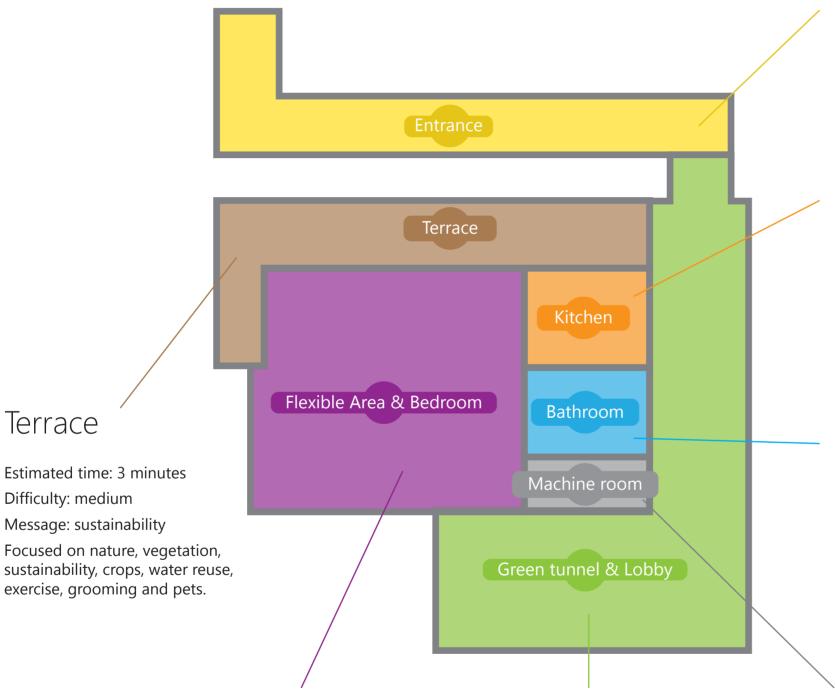
Date:11/3/2014

Code: PT-101

Trópika public tour

Languages: Spanish, French and English Maximum guests in the tour: 7 people Total estimated time: 12-15 minutes

Main message: "Trópika: More than a house, your home."



Entrance

Welcome

Security protocol

Tour method

Roles assignment

Kitchen

Estimated time: 3 minutes

Difficulty: high

Message: energy efficiency

Generation and power consumption, flexibility, furniture, storage, ergonomics, and

recycling in everyday tasks.

Bathroom

Estimated time: 1-2 minutes

Difficulty: low

Message: accessibility and water saving

Emphasis in accessibility through space, functional accessories, water saving, water

heating and hygiene.

Flexible area and bedroom

Estimated time: 3 minutes

Difficulty: medium

Message: functionality, versatility and comfort

In this case versatility, comfort and functionality of the space for rest, leisure activities, entertainment and

relaxing

Green tunnel and lobby

Estimated time: 2 minutes

Difficulty: medium

Message: Costarican spirit

The freshness of the Costa Rican environment

with vegetation and wetlands.

Machine room

Estimated time: 2 minutes

Difficulty: high

Message: technology

Technological equipment, electrical aspects, home automatization, HVAC, plumbing and

distribution systems.





Deliverable #7
Project Drawings

Proyect: Trópika

Team: Tec Team

Country: Costa Rica

Professional seal:

Made by: Department of Administration and Design

Sheet title

Public tour

Content: House Tour
General information

Date: 11/3/2014

Code: PT-301