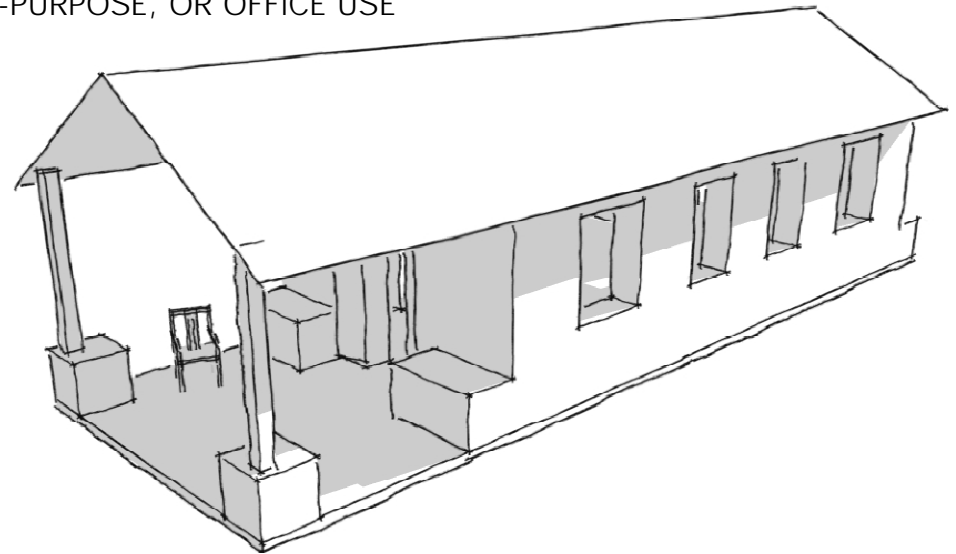
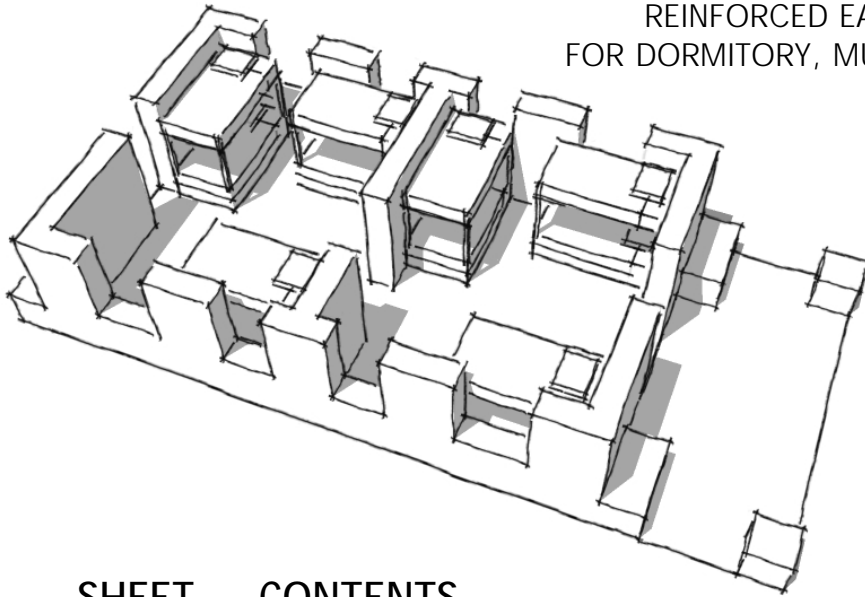


# TI KAY AN SAC TÈ/ SMALL EARTH BAG KAY

REINFORCED EARTH BAG CONSTRUCTION  
FOR DORMITORY, MULTI-PURPOSE, OR OFFICE USE



| SHEET | CONTENTS                         |
|-------|----------------------------------|
| 1     | PLAN METRIC/ METRIC PLAN         |
| 2-3   | ELEVASYON/ ELEVATIONS            |
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| 6     | SEKSYON/ SECTION                 |
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| 11    | BILDING SEVI AVEK/ BUILDING USES |
| 12    | ANGLE PLAN/ ENGLISH PLAN         |

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[www.grisb.org](http://www.grisb.org); contact: [strawhouses@yahoo.com](mailto:strawhouses@yahoo.com)

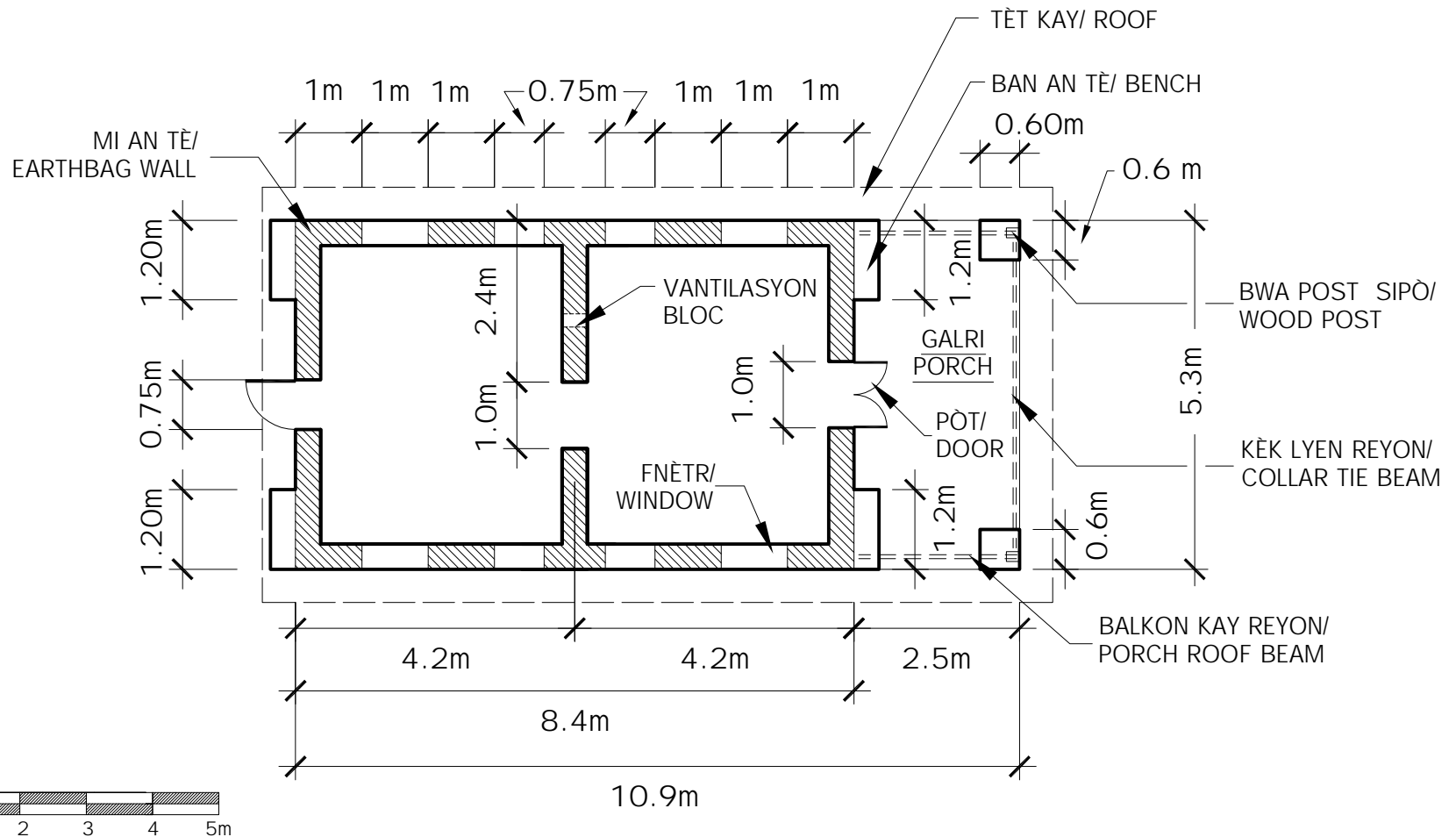
## **Earthbag Structures**

[www.earthbagstructures.com](http://www.earthbagstructures.com)

## **Patti Stouter**

Site & Building Design for Warm Climates  
contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

PLANS IN HAITIAN CREOLE AND ENGLISH  
VERSION 1.0 (UNCORRECTED CREOLE) 8/5/2010



**REMAK:**

TACHE ANKADREMAN KAY BALKON YO NAN BAG REYON BYEN.

GADE FÈY 4 POU TOUT REMAK.

**NOTES:**

ATTACH PORCH ROOF FRAMING SECURELY TO BOND BEAM.

SEE SHEET 4 FOR ALL NOTES.

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[www.earthbagstructures.com](http://www.earthbagstructures.com), Colorado & New York  
 contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

**PLAN METRIK/ METRIC PLAN**

TI KAY AN TÈ/ SMALL EARTHBAG KAY  
 L'ENFANT DE L'ESPOIR  
 LEOGÂNE, HAITI

DESIGN: PATTI STOUTER

CHECKED BY: OG

DATE: JULY 29, 2010

|   |            |     |
|---|------------|-----|
| 1 | PORCH ROOF | 8/5 |
|---|------------|-----|

| # | REVISION | DATE |
|---|----------|------|
|---|----------|------|

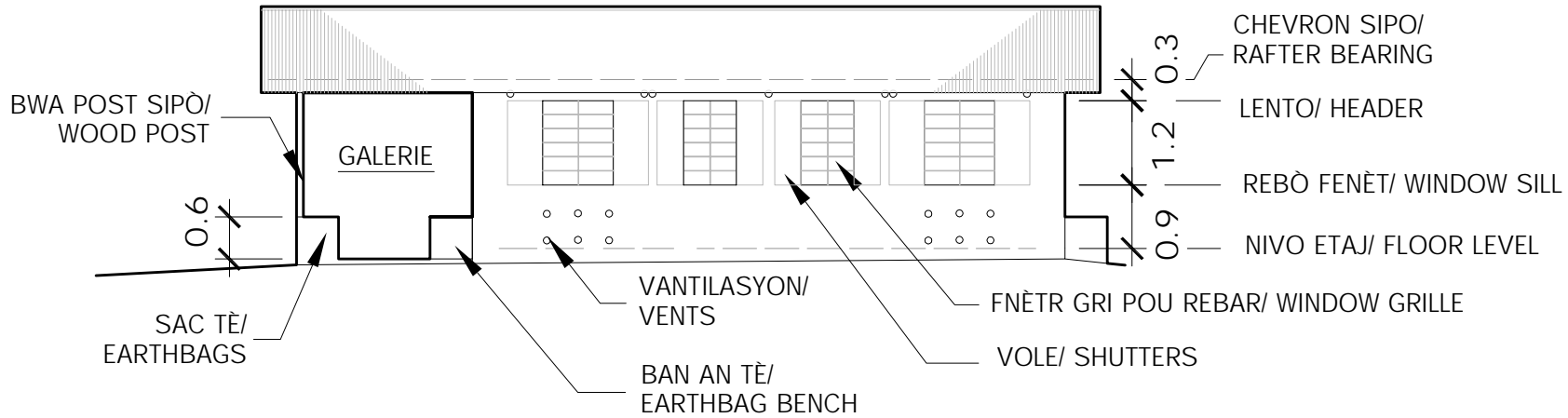
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SHEET #

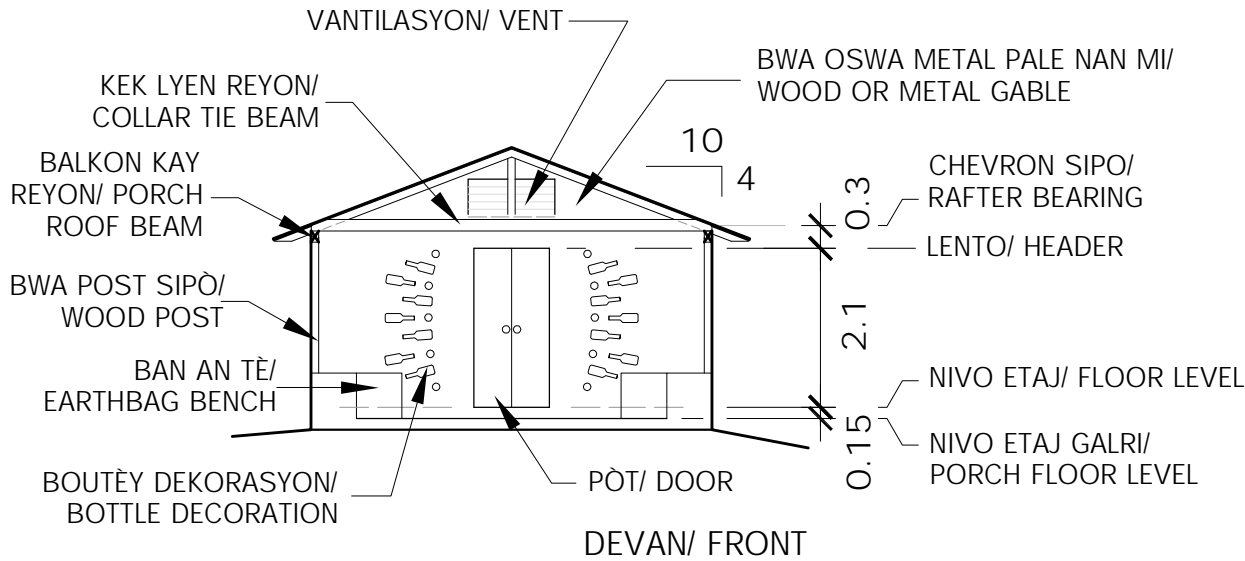
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OF 12

FILE NAME:  
EDE DORM

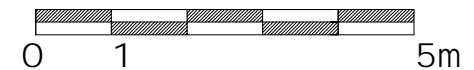


DWA BÒ/ RIGHT SIDE  
BÒ AVÈK VAN/ WINDY SIDE



DEVAN/ FRONT

REMAK: BAN RADISSEUR MI./  
NOTE: BENCHES REINFORCE WALLS.

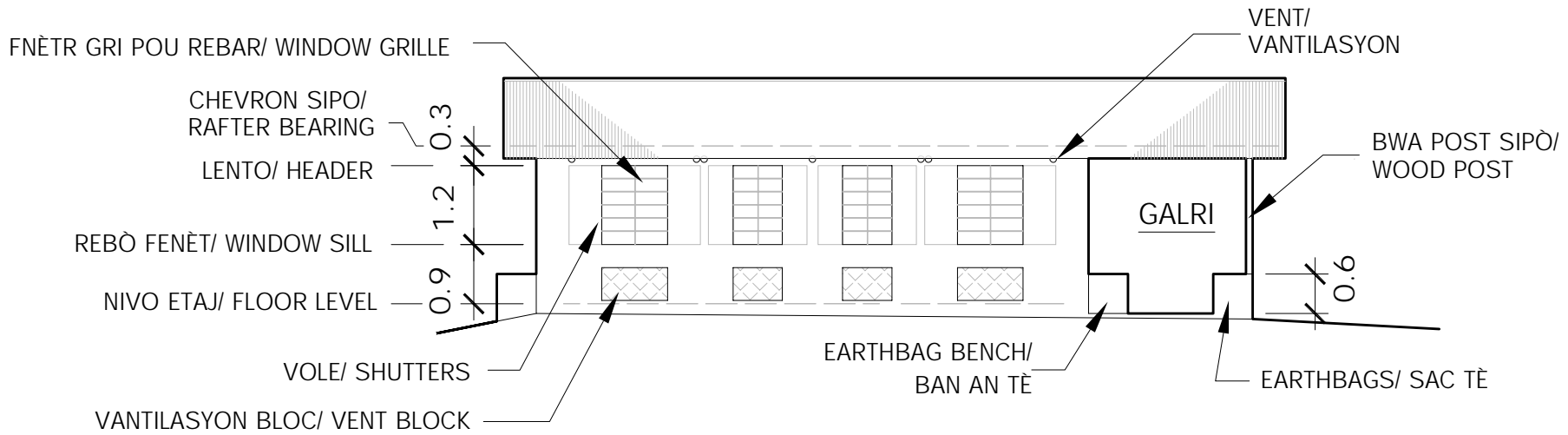


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[www.earthbagstructures.com](http://www.earthbagstructures.com), Colorado & New York  
contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

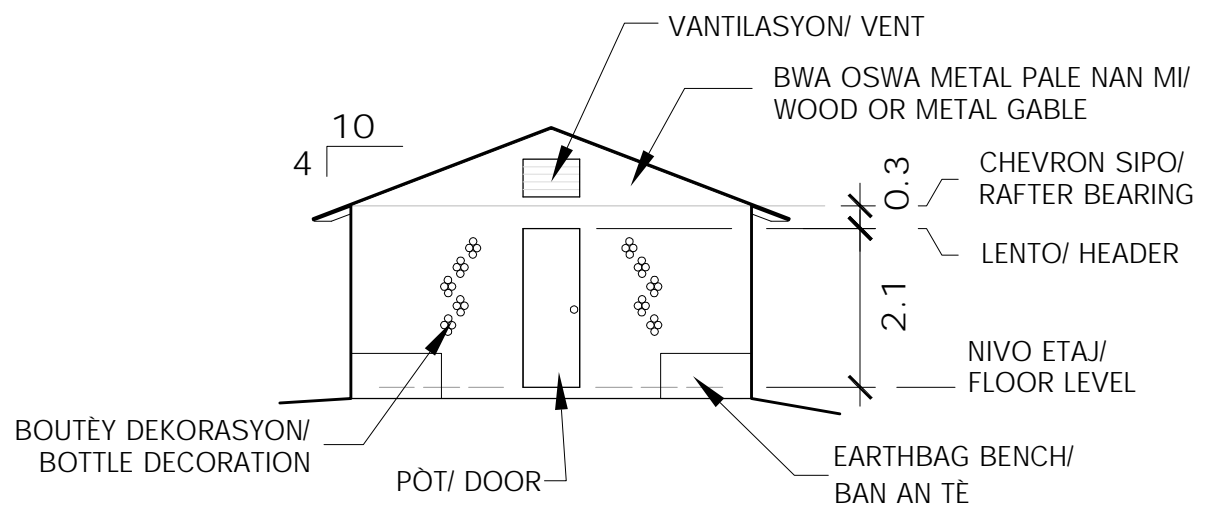
**ELEVASYON 1/ ELEVATIONS 1**  
TI KAY AN TÈ/ SMALL EARTH BAG KAY  
L'ENFANT DE L'ESPOIR  
LEOGÂNE, HAITI

|                       |                |
|-----------------------|----------------|
| DESIGN: PATTI STOUTER |                |
| CHECKED BY: OG        |                |
| DATE: JULY 29, 2010   |                |
| 1                     | PORCH ROOF 8/5 |
| #                     | REVISION DATE  |

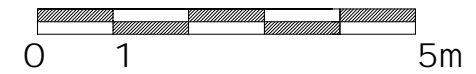
SCALE 1:100  
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**2**  
OF 12  
FILE NAME:  
EDE DORM



KITE BÒ/ LEFT SIDE  
ABRI/ SHELTERED SIDE



DÉYÉ/ REAR



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 contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

ELEVASYON 2/ ELEVATIONS 2  
 TI KAY AN TÈ/ SMALL EARTH BAG KAY  
 L'ENFANT DE L'ESPOIR  
 LEOGÂNE, HAITI

|                       |          |      |
|-----------------------|----------|------|
| DESIGN: PATTI STOUTER |          |      |
| CHECKED BY: OG        |          |      |
| DATE: JULY 29, 2010   |          |      |
| #                     | REVISION | DATE |

SCALE 1:100  
 SHEET #  
**3**  
 OF 12  
 FILE NAME:  
 EDE DORM

REMAK: NÒT ANGLE YO KÒRÈK. TRADIKSYON KRÈYOL SE APEPRE.

PYE: ENJENYÈ CHÈK SOL POU FÒS KI BAY AK KONSEYE POU PYE.

KONSEPSYON: PLAN SE POU SÈL ISTWA 38 cm EPÈ RANFÒSE MIRAY RANPA EARTHBAG POU 2.4 m WOTÈ MAKSIMÒM, AK MI PWA LIMYÈ YO PALE NAN BWA AK / OSWA METAL. TRAVAY BYEN YO NAN ZÒN NAN DANJÈ TRAMBLEMAN TÈ, KENBE DISTANS ANT OUVÈTI AK POU KWEN MIRAY JAN LI PARÈT SOU PLAN. GADE FÈY 5 POU RANFÒSMAN.

POU PI GWO WOTÈ, GALATA, OSWA ANWO NIVO BATI NAN BWA PIL AN PLIS OSWA KONTREFOR DWE TE AJOUTE.

KONSTRIKSYON EARTHBAG (SAC TÈ): ITILIZE TISE SAK POLIPROPILÈN KI PA TE KITE SOTI NAN SOLÈY LA. RANPIL SACHE KI GENTÈ KI GEN AJIL KI PA EKSPANSYON AK SAB OSWA GRAVYE. METE SAK NIVO AK PLOM. PONN 2 FIL KAB VOLE AND CHAK KOUCH NAN SACHE. CHVOCHMAN TOUT SAK MINIMÒM 20 cm BAN MARE NAN MI YO AK SACHÈ YO AK FIL KAB. DAME TOUT MIRAY BYEN. EKSTERYÈ PLATTE VIT OSWA PWOTEJE SAK SOTI NAN SOLÈY.

MANTO FINI: EARTHBAG PLEN AK PI SOL KA SIPÒTE STUK SIMAN YO NAN SAN YO PA BLOKE. TRÈ LOU RANPLI AJIL KA BEZWEN PLATTE A LACHO OSWA TÈ. PLATTE TÈS ANVAN LÈ L SÈVI AVÈK. MENJE LACHO PLATTE AK SAB NAN YON PWOPÒSYON YO MENM JAN STUK SIMAN.

NOTES: ENGLISH NOTES ARE CORRECT. CREOLE TRANSLATION IS APPROXIMATE.

FOOTING: ENGINEER TO CHECK SOIL FOR BEARING STRENGTH AND ADVISE FOR FOOTING.

DESIGN: THIS PLAN IS FOR SINGLE STORY 38 cm THICK REINFORCED EARTHBAG WALLS OF 2.4m MAXIMUM HEIGHT, WITH LIGHT WEIGHT GABLE WALLS OF WOOD AND/ OR METAL.

TO FUNCTION WELL IN SEISMIC RISK AREAS, KEEP DISTANCE BETWEEN OPENINGS AND TO WALL CORNERS AS SHOWN ON PLANS. SEE SHEET 5 FOR REINFORCEMENT SPACING. FOR TALLER WALLS, A LOFT, OR A SECOND STORY BUILT OF WOOD OR BAMBOO ADDITIONAL EARTHBAG PIERS OR BUTTRESSES MUST BE ADDED.

EARTHBAG CONSTRUCTION: USE WOVEN POLYPROPYLENE BAGS THAT HAVE NOT BEEN LEFT OUT IN THE SUN. FILL EARTHBAGS WITH SOIL THAT INCLUDES A NON-EXPANSIVE CLAY AND SAND OR GRIT. LAY 2 STRANDS BARBED WIRE BETWEEN COURSES. LAY WALLS LEVEL AND PLUMB, AND OVERLAP BAGS 20 cm MINIMUM. TIE BENCHES INTO WALLS WITH OVERLAPPING BAGS AND WIRE.

TAMP ALL WALLS WELL. PLASTER EXTERIOR QUICKLY OR PROTECT BAGS FROM SUN.

FINISH COAT: EARTHBAG FILLED WITH MOST SOILS CAN SUPPORT CEMENT STUCCO IN FROST-FREE AREAS. VERY HEAVY CLAY FILL MAY REQUIRE LIME OR EARTH PLASTER. PRE-TEST PLASTERS. PREPARE LIME PLASTER WITH SAND AND LIME IN THE SAME PROPORTIONS AS CEMENT STUCCO.

**GRISB & Earthbag Structures**

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contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

**REMAK/ NOTES**

TI KAY AN TÈ/ SMALL EARTHBAG KAY  
L'ENFANT DE L'ESPOIR  
LEOGÂNE, HAITI

DESIGN: PATTI STOUTER

CHECKED BY: OG

DATE: JULY 29, 2010

| # | REVISION | DATE |
|---|----------|------|
|   |          |      |

SHEET #

4

OF 12

FILE NAME:  
EDE DORM

REBAR PWOCHÈN POU TOUT OUVÈTI/  
REBAR NEXT TO ALL OPENINGS

BROCH REBAR NAN 60 cm/  
60 cm REBAR PINS @ 60 cm

REYON AK LENTO/ BOND  
BEAM AND LINTELS

REBAR NAN KWEN/  
REBAR AT CORNERS

REDISEUR NAN KWEN/  
BRACES AT CORNERS

REBAR NAN 1.2m NAN MI/  
REBAR AT 1.2 m IN WALLS

RANFOR TEREN ANBA  
FNÈTR/ BRACING STRIP  
BENEATH WINDOW

PYE/  
FOOTING

RANFOR TEREN ANBA ETAJ/  
METAL STRIP BENEATH FLOOR

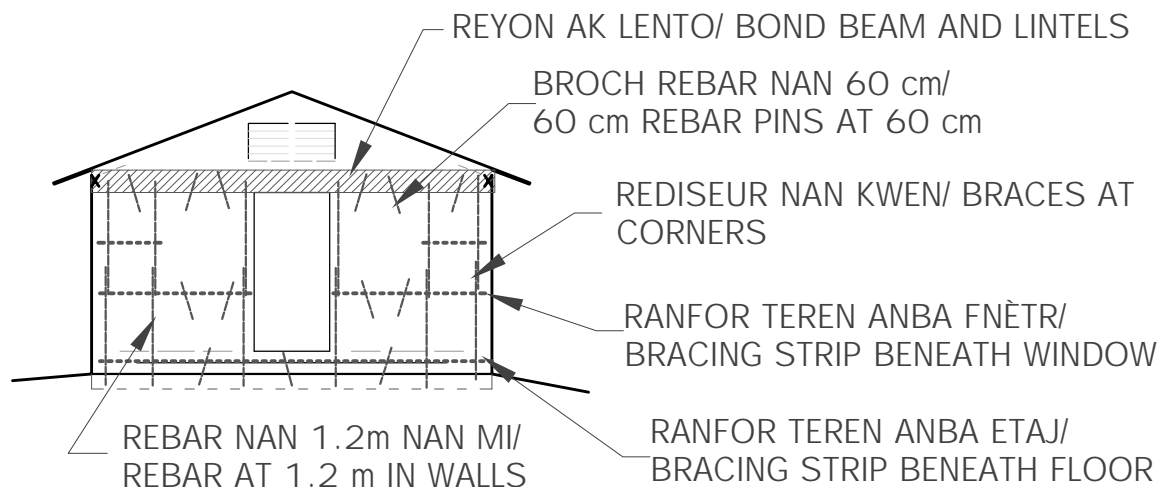
BÒ AFICHAJ/ SIDE VIEW

REMAK:

1. REBAR 1/2 POUS 12 mm DYAMÈT
2. RANFOR PIS DE 20 CM LAJÈ METAL TWA, SOUDE TISU FIL ELEKTRIK, OSWA GEOGRID. CHVOCHMAN BOR AK KWEN 15 cm.

NOTES:

1. REBAR 1/2 INCH DIAMETER.
2. BRACING STRIP 20 cm WIDE ROOFING METAL, WELDED WIRE FABRIC, OR GEOGRID. OVERLAP EDGES AND CORNERS 15 cm.



DEVAN- DÈYÈ AFICHAJ/ FRONT- REAR VIEW



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 contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

**RANFÒSE/ REINFORCEMENT**

TI KAY AN TÈ/ SMALL EARTHBAG KAY  
 L'ENFANT DE L'ESPOIR  
 LEOGÂNE, HAITI

DESIGN: PATTI STOUTER  
 CHECKED BY: OG  
 DATE: JULY 29, 2010

| # | REVISION | DATE |
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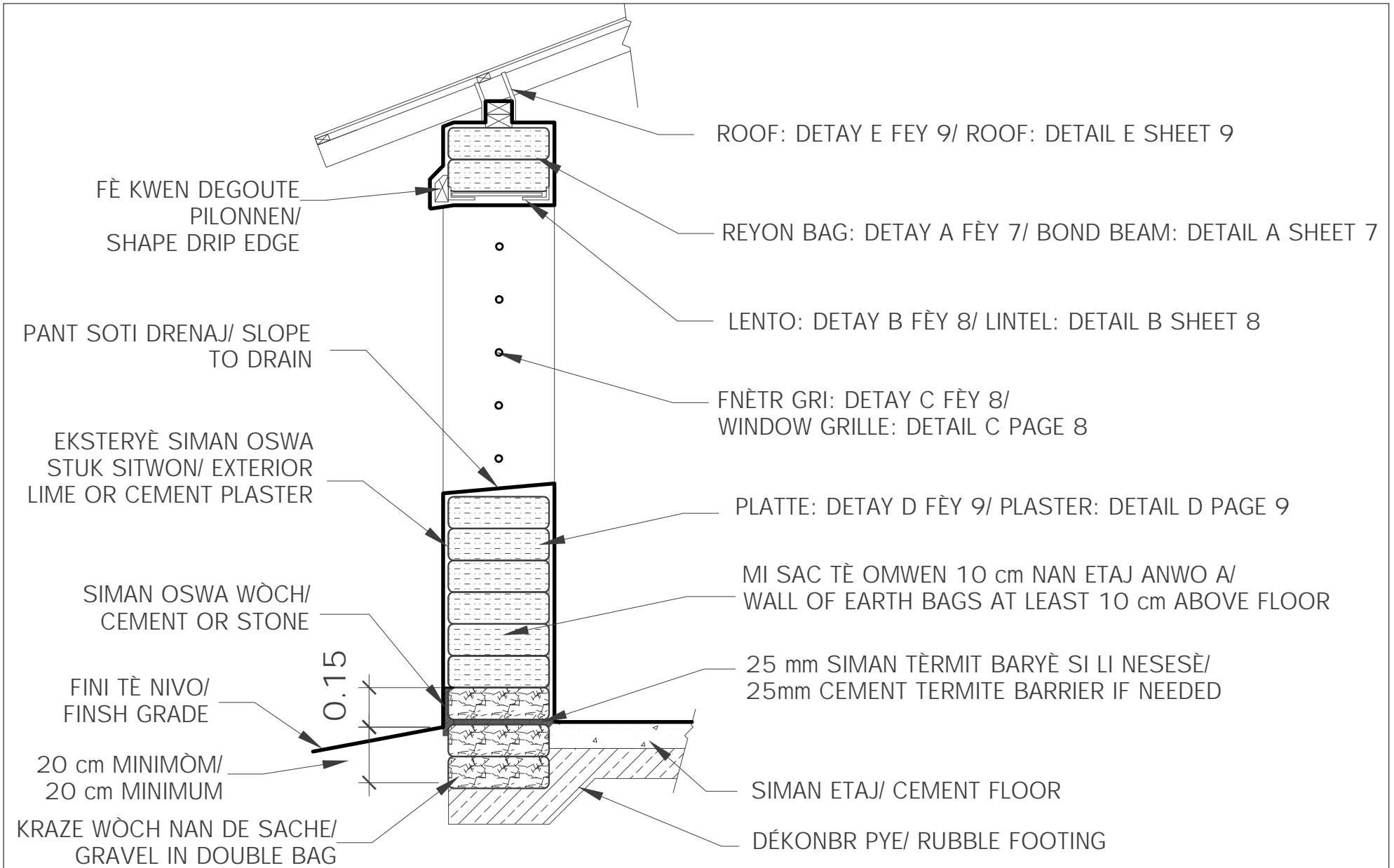
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SHEET #

5

OF 12

FILE NAME:  
EDE DORM



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 contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

## SEKSYON/ SECTION

TI KAY AN TÈ/ SMALL EARTHBAG KAY  
 L'ENFANT DE L'ESPOIR  
 LEOGÂNE, HAITI

DESIGN: PATTI STOUTER

CHECKED BY: OG

DATE: JULY 29, 2010

| # | REVISION | DATE |
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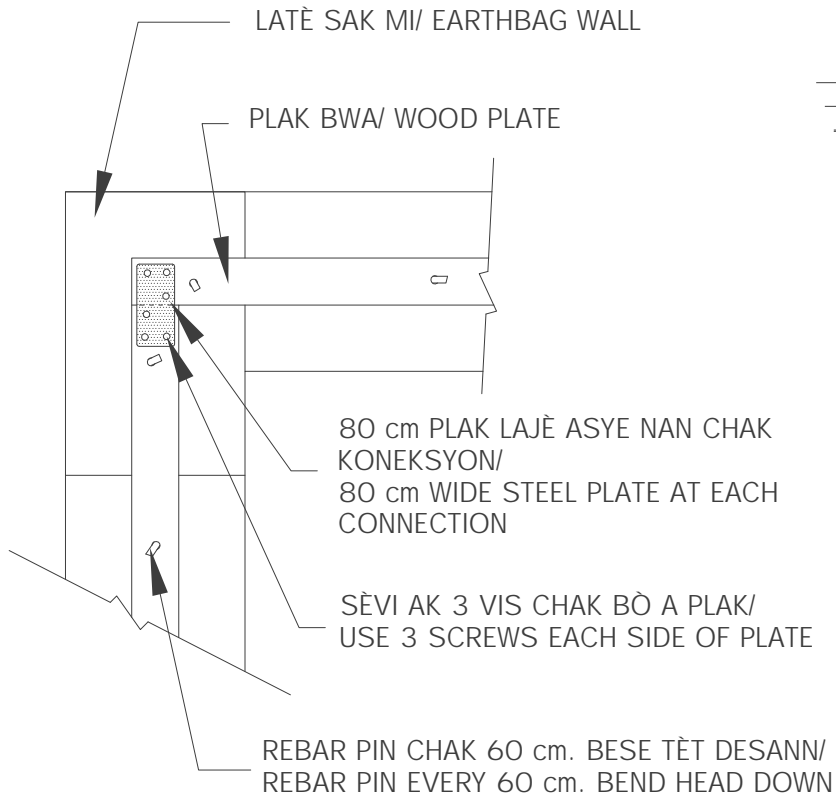
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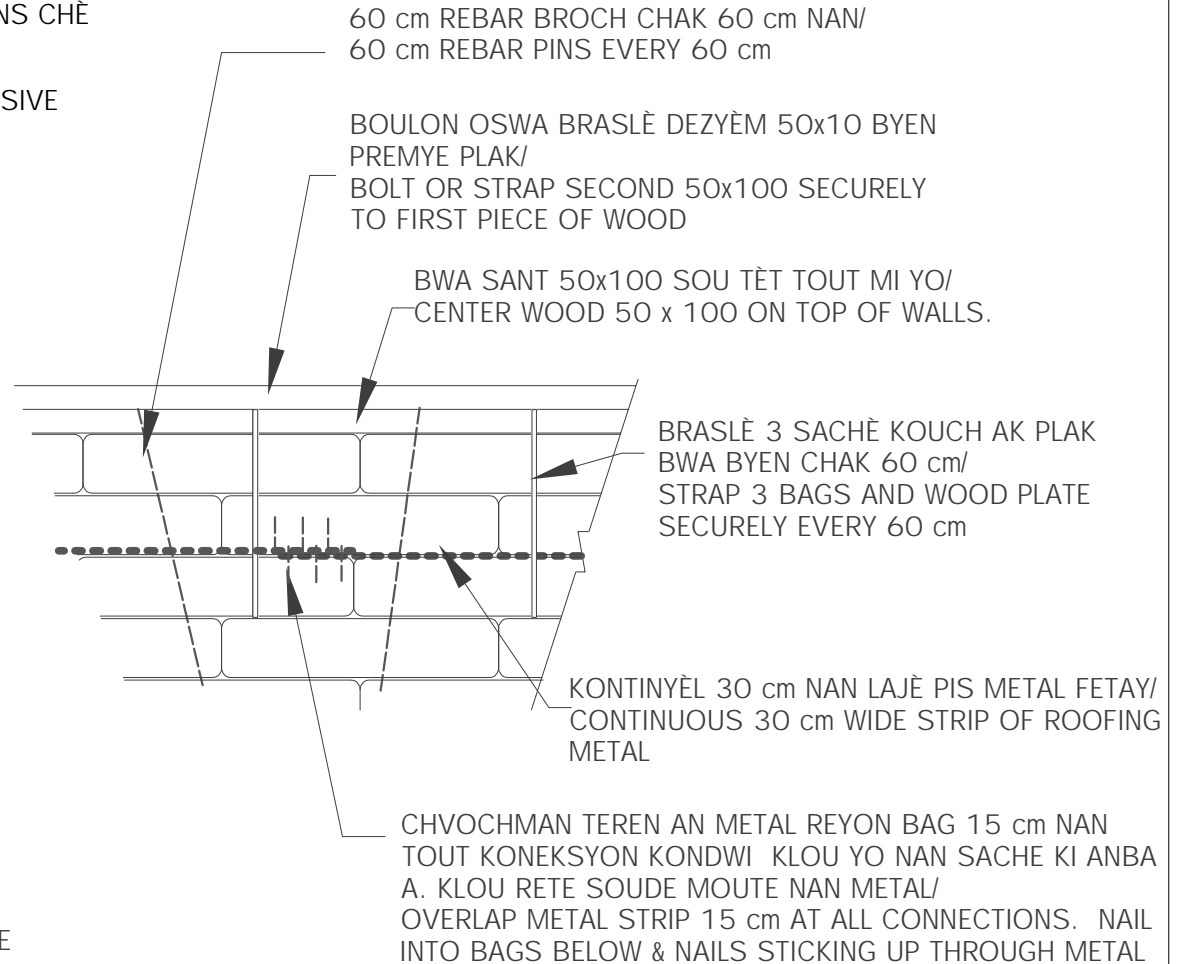
OF 12

FILE NAME:  
EDE DORM

REMAK: BWA SA A AK LÒT METAL SE YON ALTÈNATIF MWENS CHÈ  
 REYON RANFÒSE KONKRÈ BAG.  
 NOTE: THIS WOOD AND METAL RING BEAM IS A LESS EXPENSIVE  
 ALTERNATIVE TO REINFORCED CONCRETE.



TÈT WÈ/ TOP VIEW



BÒ WÈ/ SIDE VIEW

**A** CORRUGATED METAL RING BEAM/

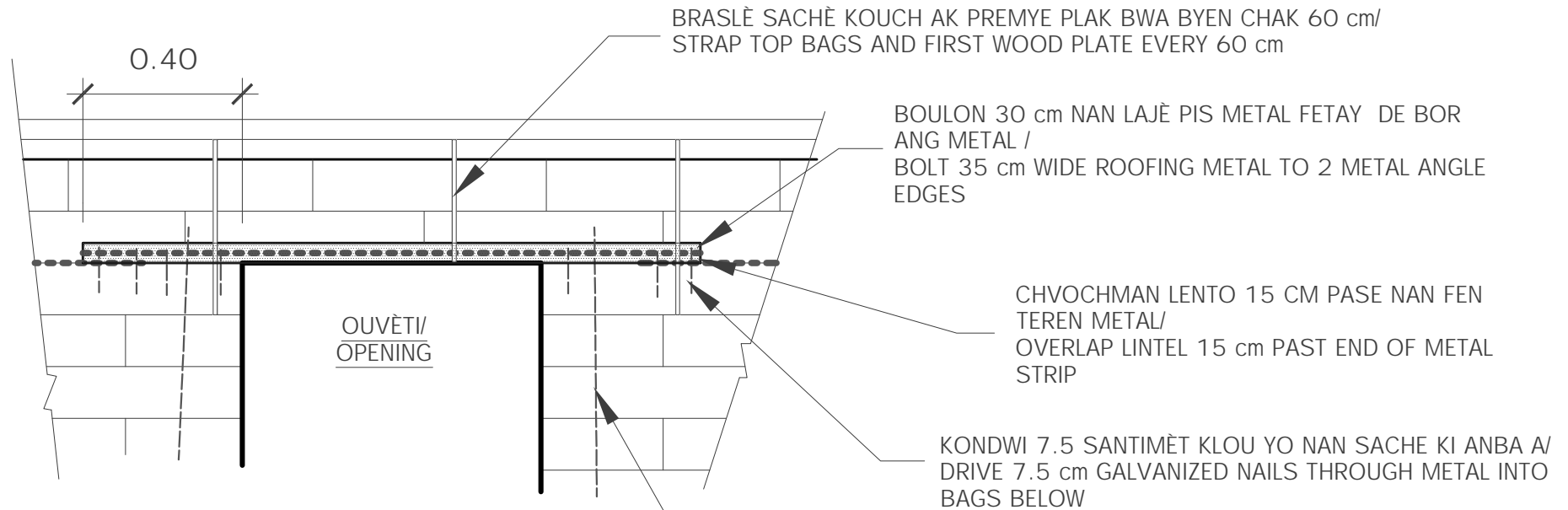
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 contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

DETAI 1/ DETAILS 1  
 TI KAY AN TÈ/ SMALL EARTH BAG KAY  
 L'ENFANT DE L'ESPOIR  
 LEOGÂNE, HAITI

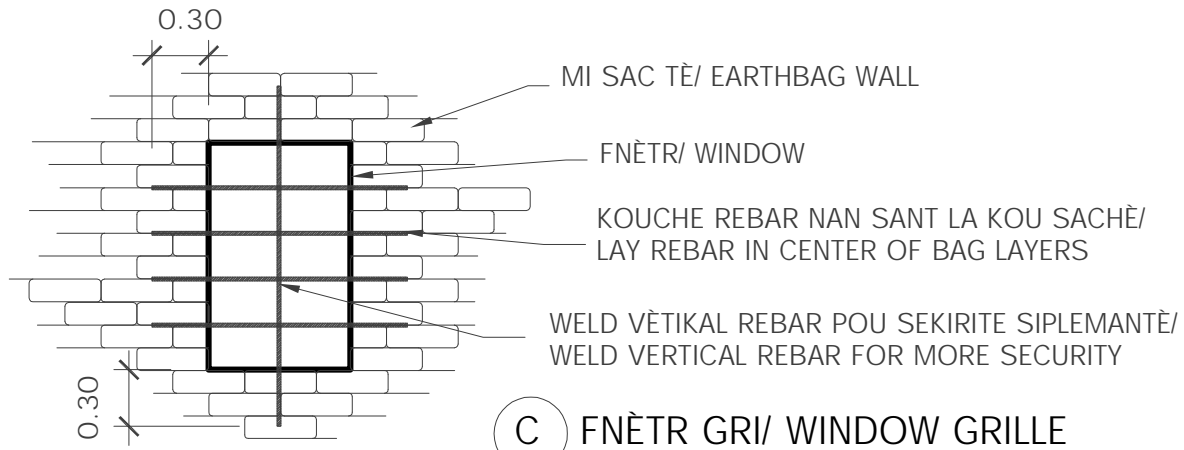
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 CHECKED BY: OG  
 DATE: JULY 29, 2010

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| 1 | DETAI A  | 8/4  |
| # | REVISION | DATE |

SCALE VARIES  
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 FILE NAME:  
 EDE DORM



**B** LENTO POU PÒT OSWA FNÈTR / DOOR OR WINDOW LINTEL

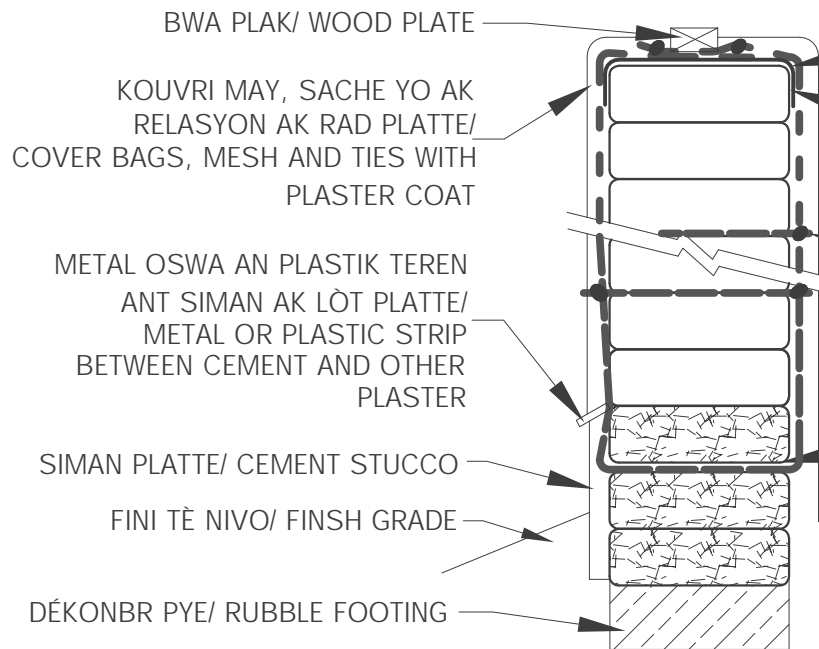


**C** FNÈTR GRI / WINDOW GRILLE

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 contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

**DETAY 2 / DETAILS 2**  
 TI KAY AN TÈ / SMALL EARTHBAG KAY  
 L'ENFANT DE L'ESPOIR  
 LEOGÂNE, HAITI

|                       |               |
|-----------------------|---------------|
| DESIGN: PATTI STOUTER | SCALE VARIES  |
| CHECKED BY: OG        | SHEET #       |
| DATE: JULY 29, 2010   | 8             |
|                       | OF 12         |
|                       | FILE NAME:    |
| #                     | REVISION DATE |
|                       | EDE DORM      |



RALE MAY SERE CHVOCHMAN AK MARE BYEN SOU TÈT MIRAY/  
PULL MESH TIGHT, OVERLAP AND FASTEN SECURELY ON TOP OF WALL

EPÈ FÈY PLASTIK ANPECHE DOMAJ/  
THICK PLASTIC SHEET TO PREVENT WATER DAMAGE

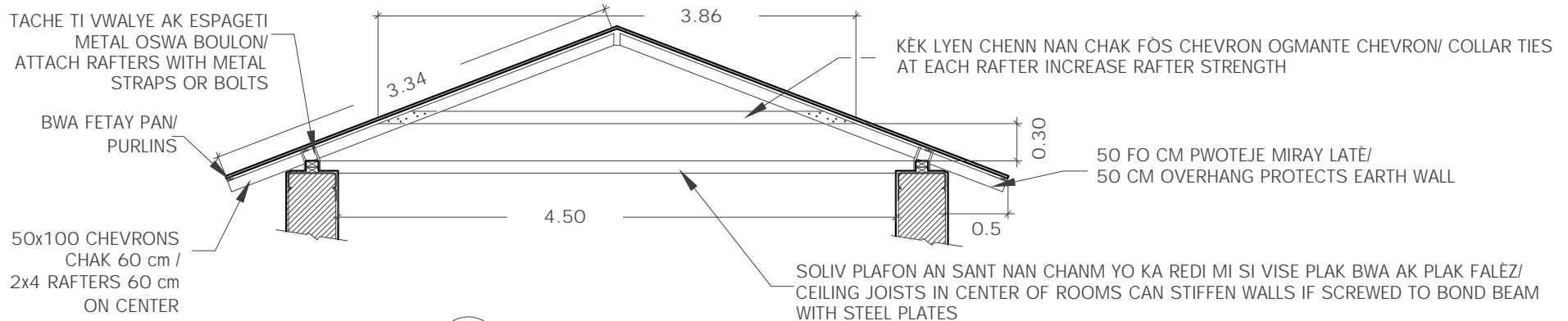
DLO CHAK KATRIYÈM AK 60 cm ANSANM MIRAY MARE MAY AK FÒ KÒD OSWA KAB/  
TIE MESH WITH STRONG CORD OR WIRE EVERY FOURTH ROW AND 60 cm ALONG WALL

KOUCHE PWASON NÈT OSWA POUL FIL ELEKTRIK SOU SACHÈ PREMYE GRAVEL ANWO LA FINI KLAS/  
LAY FISHNET OR CHICKEN WIRE ON FIRST GRAVEL BAG ABOVE FINISH GRADE

**D** STRUCTURAL PLASTER

REMAK: MAY ANPIL OGMANTE FÒS MI NAN TRANBLEMANNTÈ  
NOTE: MESH GREATLY INCREASES WALL STRENGTH IN EARTHQUAKES.

STICKY CLIP



**E** TWA/ ROOF

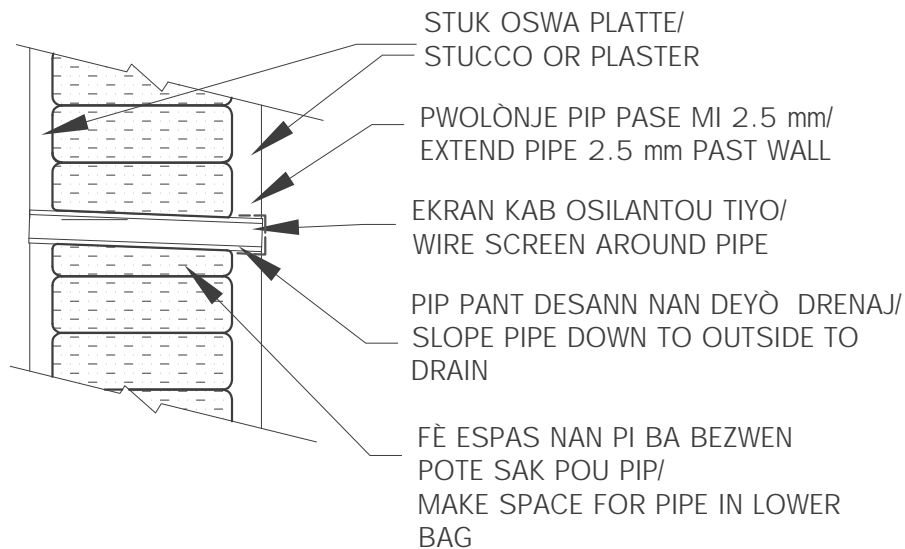
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DETAI 3/ DETAILS 3  
TI KAY AN TÈ/ SMALL EARTHBAG KAY  
L'ENFANT DE L'ESPOIR  
LEOGÂNE, HAITI

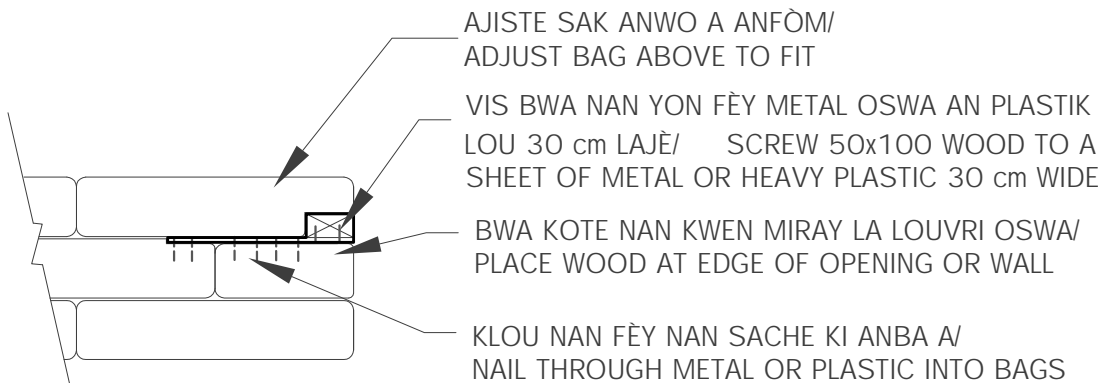
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DATE: JULY 29, 2010

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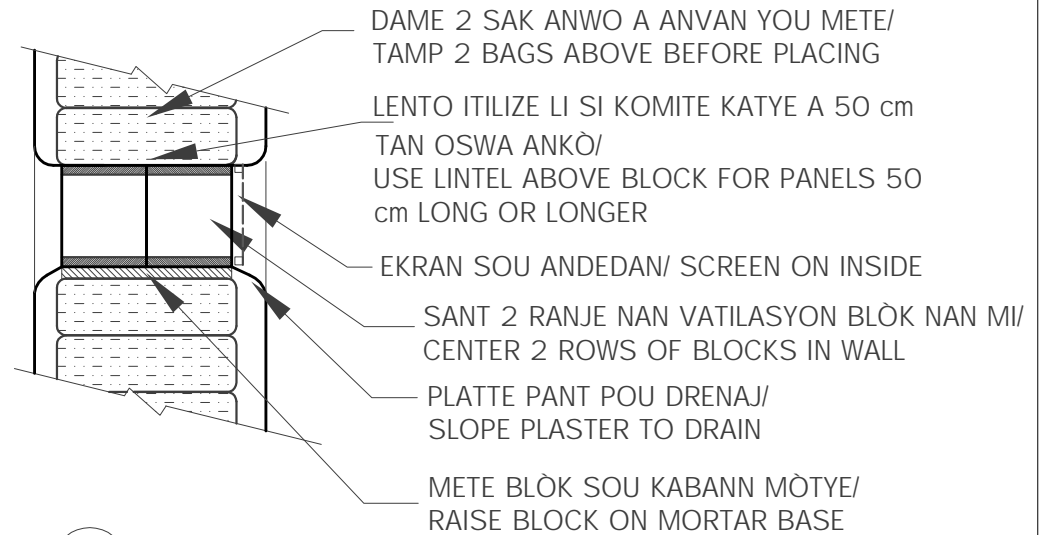
SCALE VARIES  
SHEET #  
**9**  
OF 12  
FILE NAME:  
EDE DORM



### F PIP VANTILASYON/ VENT PIPES

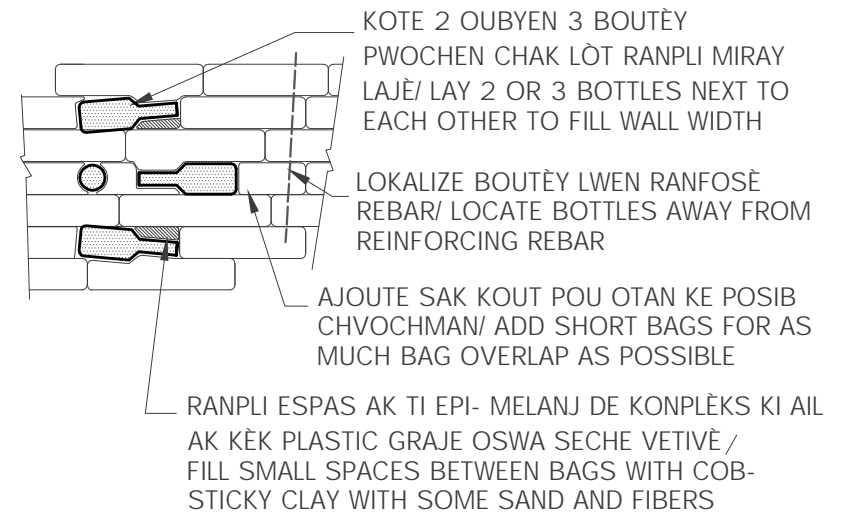


### H PLAK KLOUEZ/ NAILER PLATES



### G BLÒK VANTILASYON/ VENT BLOCK

SIMAN SIPÒTE ANT BLÒK SI LI NESESÈ/ CEMENT SUPPORTS BETWEEN BLOCK IF NEEDED



### I BOUTÈY DEKORASYON/ BOTTLE ACCENTS

## GRISB & Earthbag Structures

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## DETAY 4/ DETAILS 4

TI KAY AN TÈ/ SMALL EARTHBAG KAY  
 L'ENFANT DE L'ESPOIR  
 LEOGÂNE, HAITI

DESIGN: PATTI STOUTER

CHECKED BY: OG

DATE: JULY 29, 2010

1 VENT BLOCK 8/4

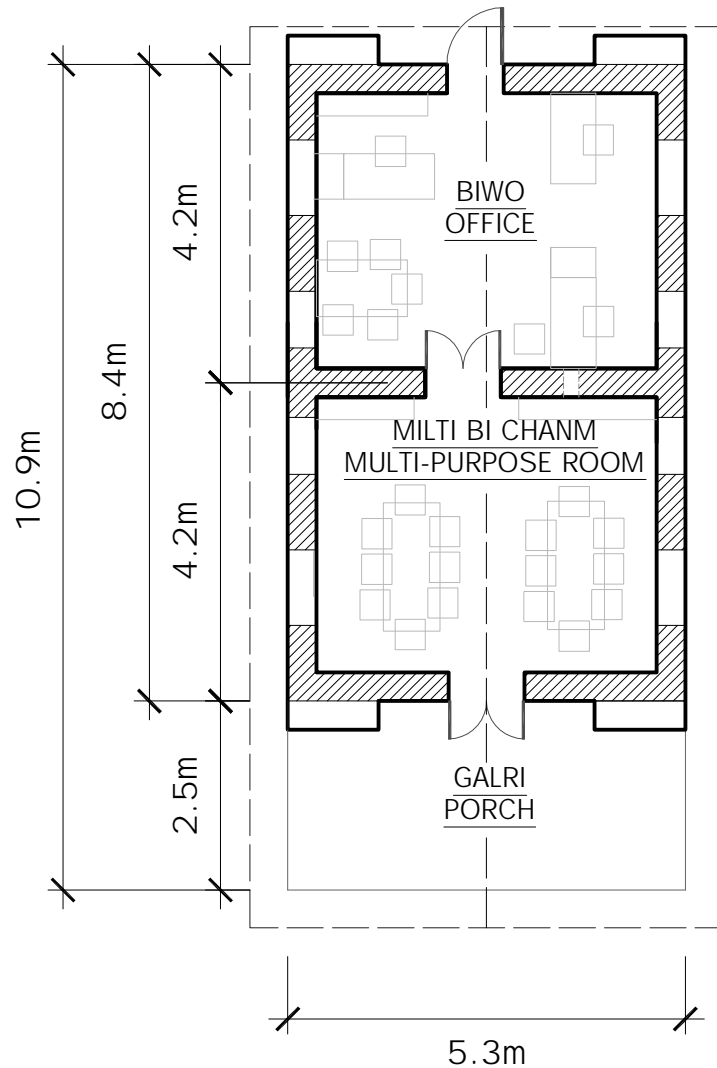
# REVISION DATE

SCALE VARIES

SHEET #

10  
OF 12

FILE NAME:  
EDE DORM



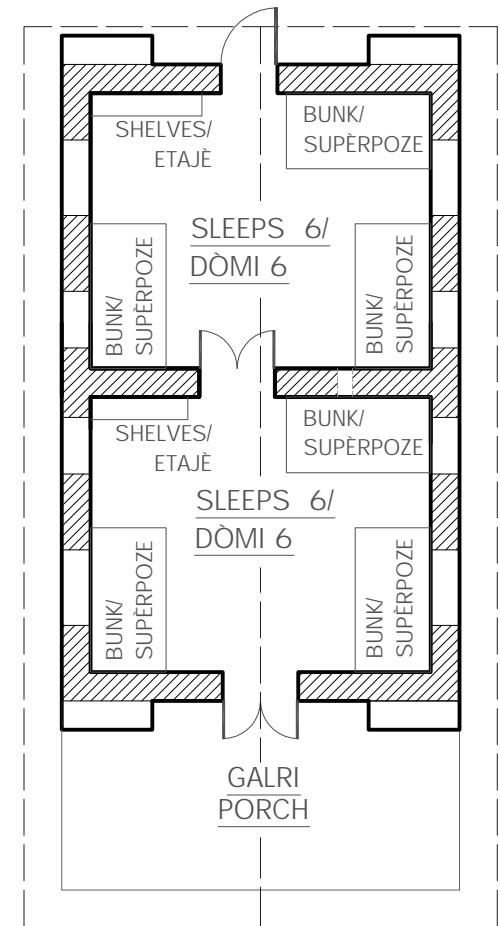
TI KAY  
SMALL KAY

34.5 m<sup>2</sup>

BIWO/ OFFICE:  
6- 8

MULTI-BI CHANM/  
MULTI-PURPOSE:  
KOTE MOUN OSWA SAL  
LEKÒL/ DINING OR SCHOOL  
16- 21

DÒTWA/ DORMITORY:  
12



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 contact: [handshapedland@yahoo.com](mailto:handshapedland@yahoo.com)

## BILDING SÈVI AVÈK/ BUILDING USES

TI KAY AN TÈ/ SMALL EARTHBAG KAY  
L'ENFANT DE L'ESPOIR LEOGÂNE, HAITI

DESIGN: PATTI STOUTER  
 CHECKED BY: OG  
 DATE: AUGUST 5/ 2010

| # | REVISION | DATE |
|---|----------|------|
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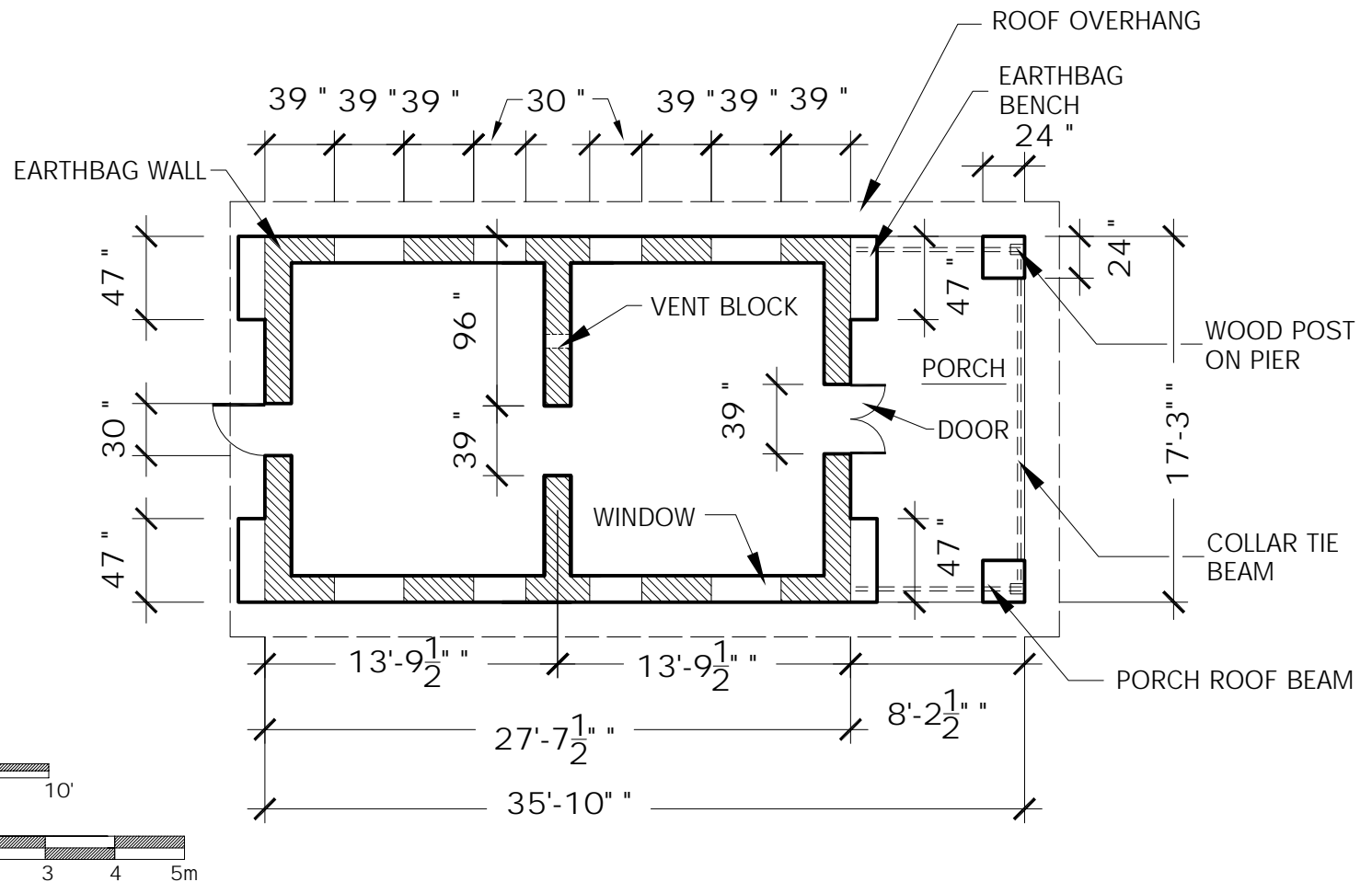
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SHEET #

11

OF 12

FILE NAME:  
EDE DORM



**NOTES:**

ATTACH PORCH ROOF FRAMING SECURELY TO BOND BEAM.  
SEE SHEET 4 FOR ALL NOTES.

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**ANGLE PLAN/ ENGLISH PLAN**  
TI KAY AN TÈ/ SMALL EARTHBAG KAY  
L'ENFANT DE L'ESPOIR  
LEOGÂNE, HAITI

|                       |                |
|-----------------------|----------------|
| DESIGN: PATTI STOUTER |                |
| CHECKED BY: OG        |                |
| DATE: JULY 29, 2010   |                |
| 1                     | PORCH ROOF 8/5 |
| #                     | REVISION DATE  |

SCALE 1:100  
SHEET #  
**12**  
OF 12  
FILE NAME:  
EDE DORM