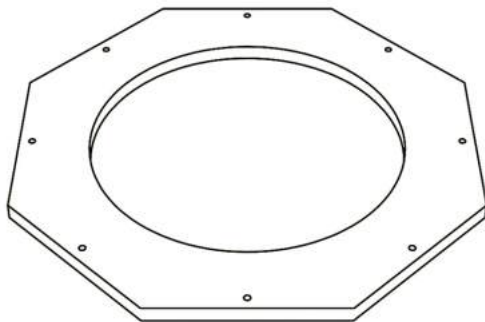




adalaj ni vav STEP WELL OF ADALAJ gujarat

FURAAT PRECAST MODULAR STEP WELL

DESIGNED TO OFFER FLEXIBLE & EFFECTIVE RAINWATER HARVESTING SOLUTIONS

**SPECIFICATIONS OF OCTAGONAL SLAB :**

DIAMETER / ACROSS DIAGONAL ~ 1450 MM

INTERNAL DIAMETER ~ 1000 MM

THICKNESS ~ 50 MM

MATERIAL - PRECAST CONCRETE

WEIGHT ~ 58 KG - HALF OCTAGONAL SLAB

STEP 03 :

PAIR OF HALF OR ONE FULL OCTAGONAL SLAB IS LEVELLED ON THE FINISHED BOTTOM SURFACE OF THE PIT

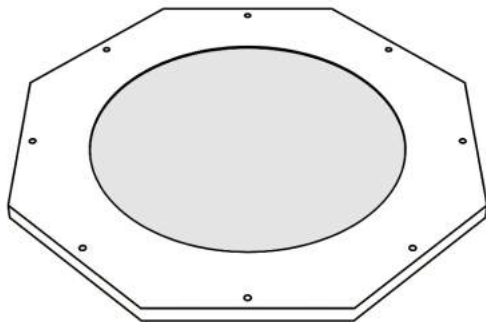
STEP 02 :

BOTTOM SURFACE OF THE PIT IS FINISHED WITH BRICKBAT CONCRETE CEMENT

STEP 01 :

A PIT OF 2000 MM DIAMETER IS EXCAVATED IN THE GROUND AT SELECTED LOCATION WITH A PREDETERMINED DEPTH BASED ON LEVELS OF RAINWATER INLETS

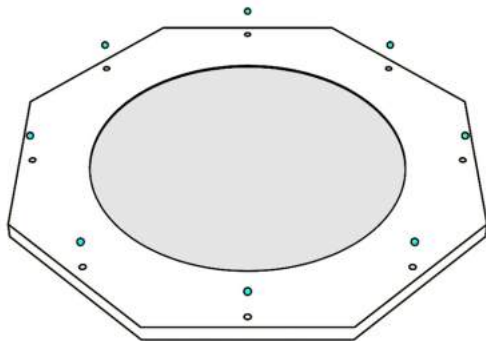
CONSTRUCTION

**STEP 04 :**

INSIDE DIAMETER OF 1000 MM IS FILLED WITH
CEMENT CONCRETE MIXTURE

INCASE OUTPUT OF THE WELL IS DESIGNED
FROM THE CENTER OF BASE, A BEND WITH
CONNECTING PIPE LINE IS PLACED BEFORE
EXECUTING STEP 02

CONSTRUCTION



SPECIFICATIONS OF SPHERICAL LOCATOR :

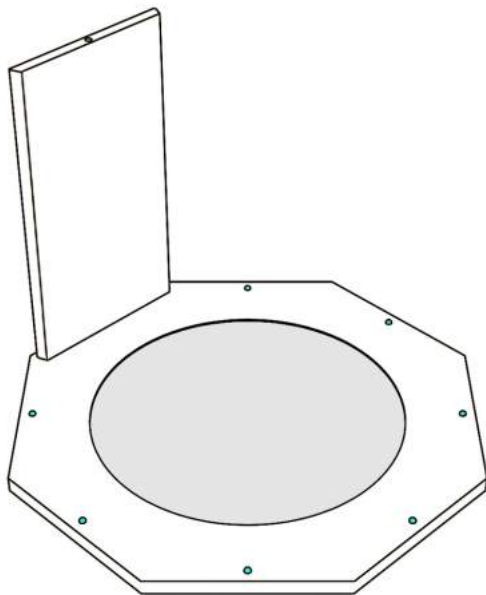
DIAMETER ~ 20 MM

MATERIAL - GLASS / POLYPROPYLENE

STEP 05 :

SPHERICAL LOCATORS ARE PLACED IN EIGHT
HEMISPHERICAL CAVITIES ON THE TOP FACE
OF OCTAGONAL SLAB

CONSTRUCTION



SPECIFICATIONS OF VERTICAL SLAB :

LENGTH X WIDTH ~ 1075 X 575 MM

THICKNESS ~ 40 MM

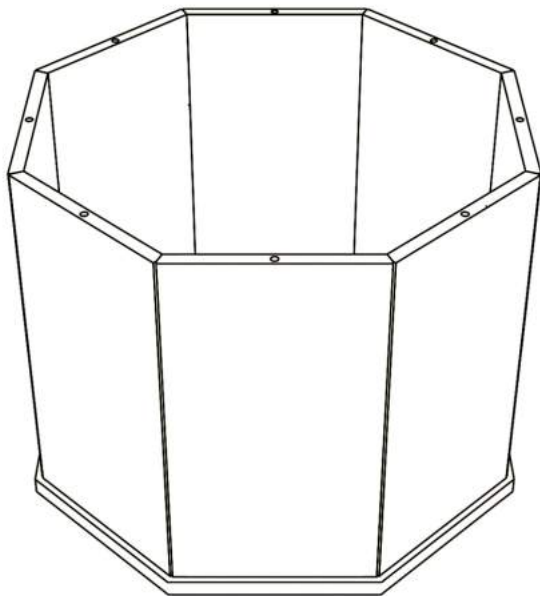
MATERIAL - PRECAST CONCRETE

WEIGHT ~ 58 KG

STEP 06/1 :

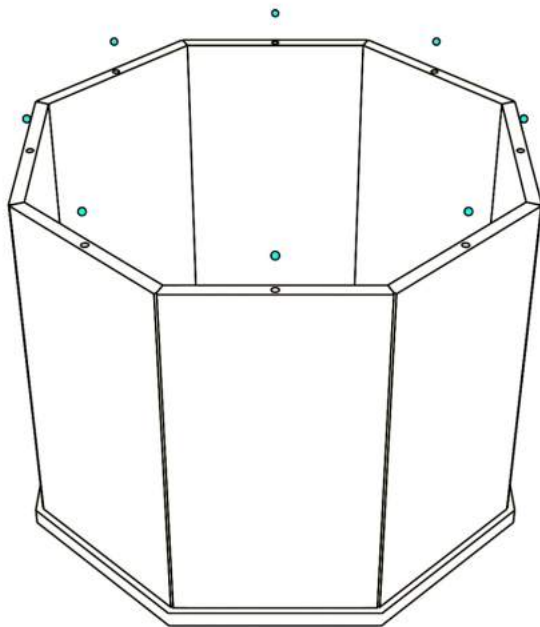
FIRST VERTICAL SLAB IS PLACED
PERPENDICULAR TO THE OCTAGONAL SLAB
BY MAKING IT REST ON A FACE HAVING
HEMISPHERICAL CAVITY

CONSTRUCTION



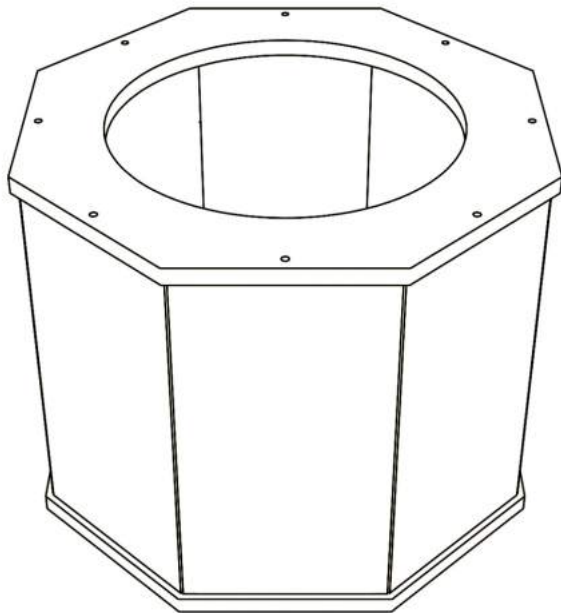
STEP 06/2 :
REMAINING VERTICAL SLABS ARE PLACED
ADJACENT TO EACH OTHER BY RESTING
THEM ON FACES HAVING HEMISPHERICAL
CAVITIES

CONSTRUCTION



STEP 07 :
SPHERICAL LOCATORS ARE PLACED AGAIN IN
HEMISPHERICAL CAVITIES ON THE FACES OF
EIGHT VERTICAL SLABS

CONSTRUCTION



SPECIFICATIONS OF ONE MODULE :

DIAMETER / ACROSS DIAGONAL ~ 1450 MM

HEIGHT ~ 1125 / 1175 MM

MATERIAL - PRECAST CONCRETE

WEIGHT ~ 700 KG

INSIDE VOLUME ~ 1.6 CU MT

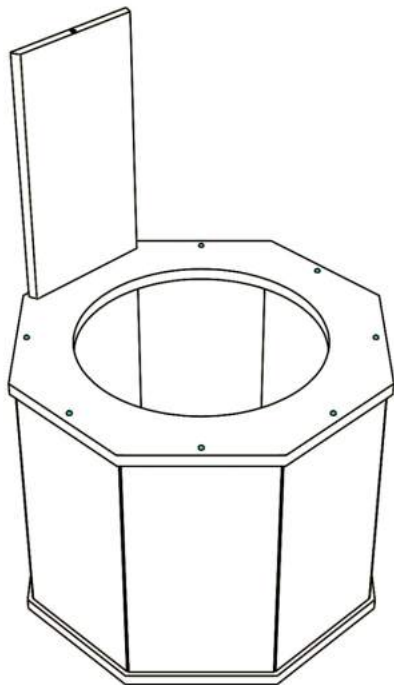
STEPS 03-08 :

THESE STEPS CONSTITUTE ONE MODULE

STEP 08 :

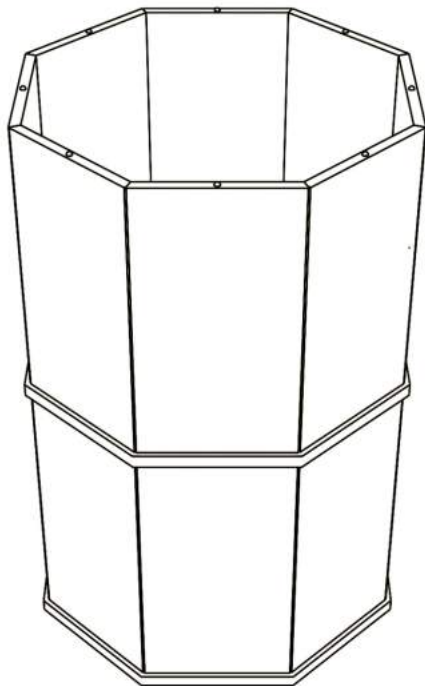
PAIR OF HALF OR ONE FULL OCTAGONAL SLAB IS PLACED ON TOP OF VERTICAL SLABS BY ENGAGING ITS EIGHT HEMISPHERICAL CAVITIES ON ITS BOTTOM SURFACE WITH SPHERICAL LOCATORS KEPT ON THE FACES OF VERTICAL SLABS

CONSTRUCTION

**STEP 09 :**

BY REPEATING STEPS 05-09 ANOTHER
MODULE CAN BE ASSEMBLED ON TOP OF
THE FIRST MODULE BY USING THE TOP
OCTAGONAL SLAB OF THE FIRST MODULE

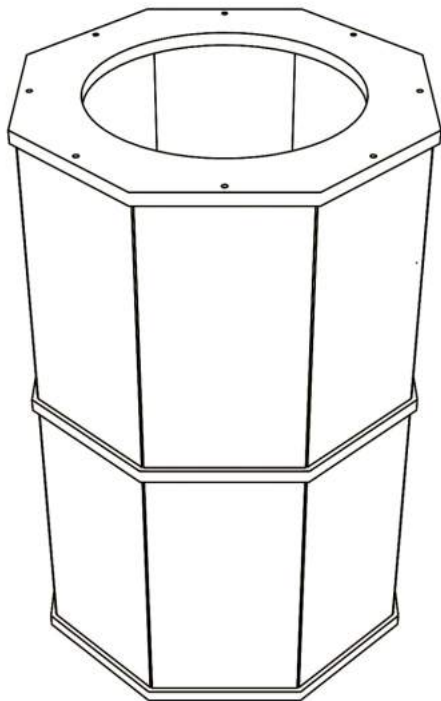
CONSTRUCTION



STEP 09 :

BY REPEATING STEPS 05-09 ANOTHER
MODULE CAN BE ASSEMBLED ON TOP OF
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OCTAGONAL SLAB OF THE FIRST MODULE

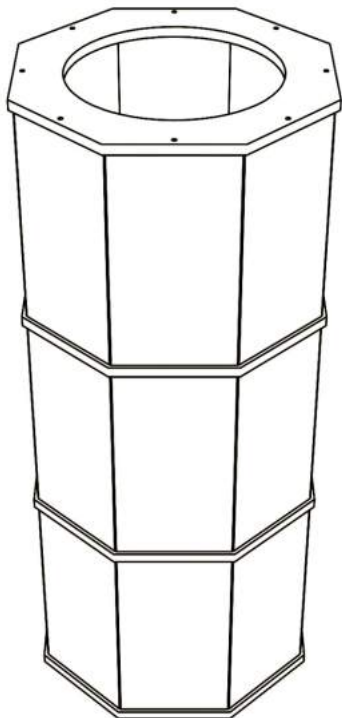
CONSTRUCTION



STEP 09 :

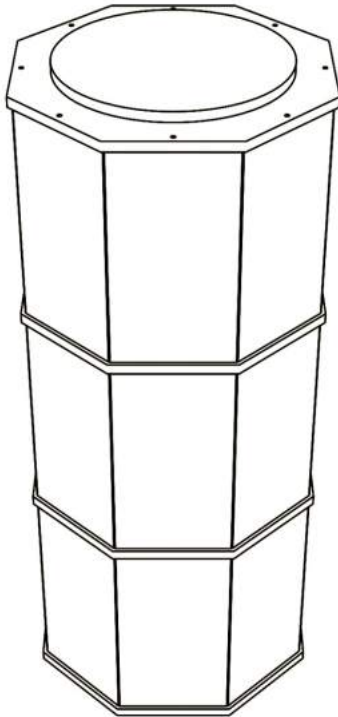
BY REPEATING STEPS 05-09 ANOTHER
MODULE CAN BE ASSEMBLED ON TOP OF
THE FIRST MODULE BY USING THE TOP
OCTAGONAL SLAB OF THE FIRST MODULE

CONSTRUCTION



STEP 10 :
BY REPEATING STEPS 05-09 ANOTHER
MODULE CAN BE ASSEMBLED ON TOP OF
THE SECOND MODULE BY USING THE TOP
OCTAGONAL SLAB OF THE SECOND MODULE

CONSTRUCTION



SPECIFICATIONS OF TOP LID :

DIAMETER ~ 1050 MM

THICKNESS ~ 50 MM

MATERIAL - PRECAST CONCRETE

WEIGHT ~ 54 KG - HALF ROUND SLAB

STEP 13 :

THE GAP BETWEEN THE OUTER SURFACE OF THE ERECTED MODULAR STEP WELL & EXCAVATED PIT IS FILLED BACK WITH EXCAVATED SOIL AND RAMMING IS DONE

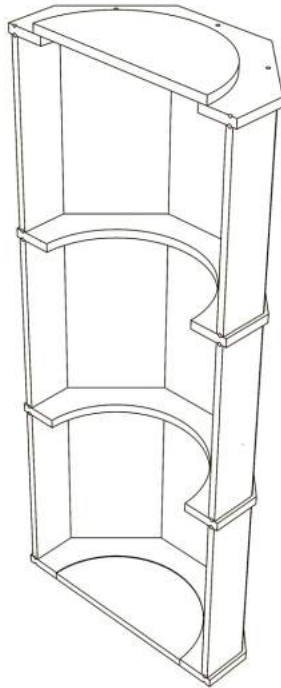
STEP 12 :

GROUTING IS DONE

STEP 11 :

PAIR OF HALF ROUND / ONE FULL ROUND LID IS PLACED ON TOP OF THE TOPMOST OCTAGONAL SLAB TO COVER 1000 MM DIAMETER OPENING

CONSTRUCTION



ADVANTAGES :

QUICK INSTALLATION

AESTHETIC LOOK & DETAILING

FLEXIBILITY IN VOLUME & DEPTH OF WELL

GOOD QUALITY PRECAST CONCRETE SLABS

INTEGRATED LARGE STEPS FOR CLIMBING
DOWN, HENCE EASY TO MAINTAIN

ONE SKILLED AND TWO UNSKILLED
LABOURERS CAN ASSEMBLE THIS WELL
WITHIN HOURS

WELL CAN BE ERECTED AROUND BORE WELL
WITHOUT SWITCHING OFF ITS POWER

WELL CAN BE ASSEMBLED WITHOUT USING
ANY SPECIAL DEVICES LIKE CHAIN PULLEY AS
WEIGHT OF EACH SLAB FACILITATES
WORKING WITH SIMPLE TOOLS, THIS MAKES
ASSEMBLY HASSLE FREE IN RURAL AREAS

SIZE, SHAPE & WEIGHT OF SLABS FACILITATES
WELL TO BE TRANSPORTED TO REMOTEST
PART OF OUR COUNTRY EVEN USING BASIC
TRANSPORT LIKE BULLOCK CART

WELL CAN BE REUSED / RECYCLED

CONSTRUCTION



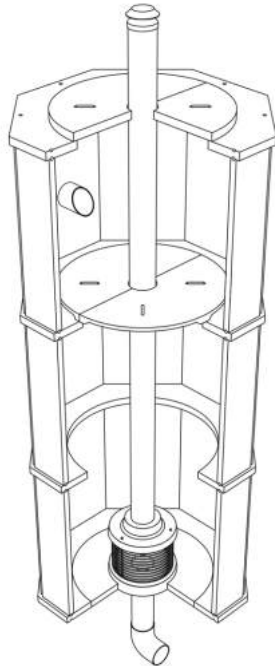
1499



2005

INSPIRED BY PAST **DESIGNED FOR FUTURE**

HARVESTING SYSTEM TO REJUVENATE EARTH, FOR DRINKING NEEDS & FOR BOREWELL RECHARGING



SPECIFICATIONS OF INTERMEDIATE LID :

DIAMETER ~ 1050 MM

THICKNESS ~ 50 MM

MATERIAL - PRECAST CONCRETE

WEIGHT ~ 54 KG - HALF ROUND SLAB

STEP 16 :

END CAP WITH AIR VENTS IS FIXED ON THE TOP END OF CENTRAL SPINE

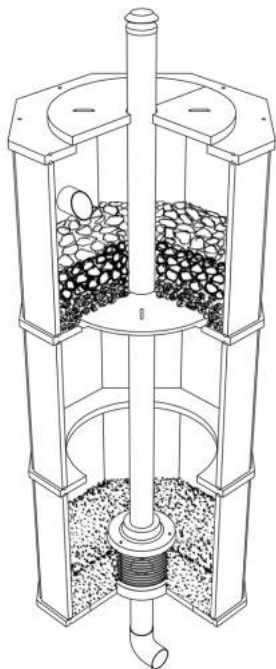
STEP 15 :

CONTINUOUS V WIRE SCREEN IS ASSEMBLED IN THE BOTTOM MODULE & ASSEMBLY OF THE CENTRAL SPINE WITH ONE END ATTACHED TO V-WIRE SCREEN & OTHER COMING OUT OF THE WELL IS DONE

STEP 14 :

INTERMEDIATE LID IS PLACED IN THE BOTTOM OF TOP MODULE, DESIGN OF INTERMEDIATE LID ALLOWS WATER TO PERCOLATE IN THE NEXT MODULE

CONSTRUCTION



SPECIFICATIONS OF V-WIRE SCREEN :

DIAMETER ~ 430 MM

HEIGHT ~ 300 / 450 / 600 MM

MATERIAL - SS 204CU / 304

APPERTURE ~ 0.3-1.2 MM - DEPENDING ON QUALITY OF FILTRATION

SPECIFICATIONS OF CENTRAL SPINE :

DIAMETER ~ 150 MM

MATERIAL - HIGH QUALITY PVC

PRESSURE RATING ~ 6 KG / CM SQUARE

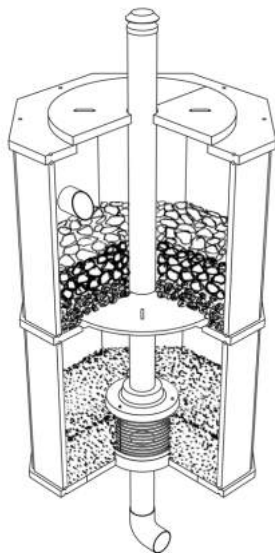
STEP 18 :

LAYERS OF CHARCOAL & GRAVEL ARE LAID ON TOP OF INTERMEDIATE LID IN THE TOP MODULE

STEP 17 :

HIGH QUALITY FILTER SAND IS FILLED IN THE BOTTOM MODULE COVERING V-WIRE SCREEN FULLY

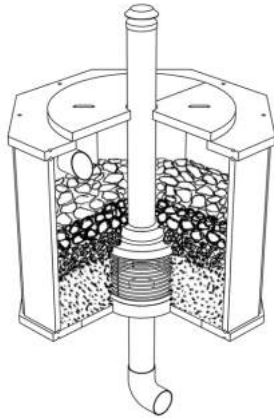
CONSTRUCTION



TWO LAYER RECHARGE WELL :

IN CASE OF EXCAVATION CONSTRAINTS &
MODERATE RAINFALL, TWO LAYER RECHARGE
WELL WORKS WITH EQUAL EFFICIENCY

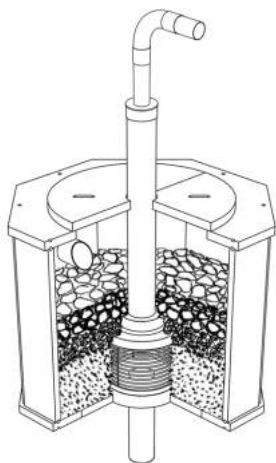
CONSTRUCTION



SINGLE LAYER RECHARGE WELL :

IN CASES OF EXTREME EXCAVATION CONSTRAINTS & LOW RAINFALL, LAYERS OF CHARCOAL & GRAVEL ALONG WITH SAND BED CAN BE ACCOMMODATED IN ONE SINGLE MODULE ALSO

CONSTRUCTION



ASSEMBLY AROUND EXISTING BORE WELL :

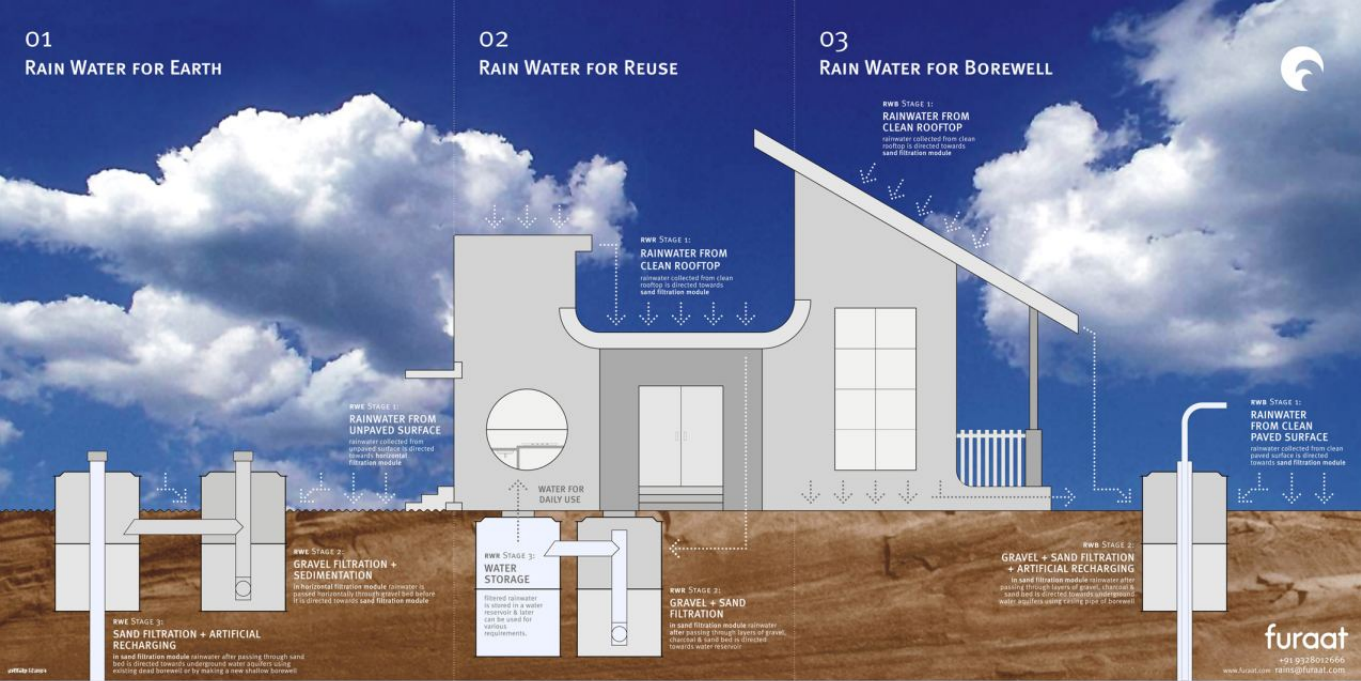
PRECAST MODULAR STEP WELL CAN BE ASSEMBLED AROUND ANY EXISTING BORE WELL WITH ANY NUMBER OF LAYERS. HOWEVER, WE RECOMMEND STRUCTURE OF MODULAR STEP WELL TO BE AWAY FROM BORE WELL; IN SUCH CASES UNDERGROUND CONNECTION OF OUTPUT OF WELL & CASING PIPE OF BORE WELL IS DONE

CONSTRUCTION

O1 RAIN WATER FOR EARTH

O2 RAIN WATER FOR REUSE

O3 RAIN WATER FOR BOREWELL



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THREE SIMPLE AND EFFECTIVE WAYS TO HARVEST RAINWATER USING PRECAST MODULAR STEPWELL

LETS USE RAINWATER

FURAAT RAINWATER CONSERVATION INITIATIVE



UNIQUE HORIZONTAL FILTRATION MODULE :

64- SPECIALLY DESIGNED 60 MM DIAMETER INLETS TO FACILITATE FAST WATER INFLOW & TO KEEP LARGE OBJECTS LIKE POLYTHENE, LEAVES ETC ON GROUND LEVEL, THIS FACILITATES EASY CLEANING DURING RAINS

BOTTOM MOST MODULE CAN BE ACCESSED FROM TOP END OF CENTRAL SPINE FOR FLUSHING / CLEANING PURPOSES

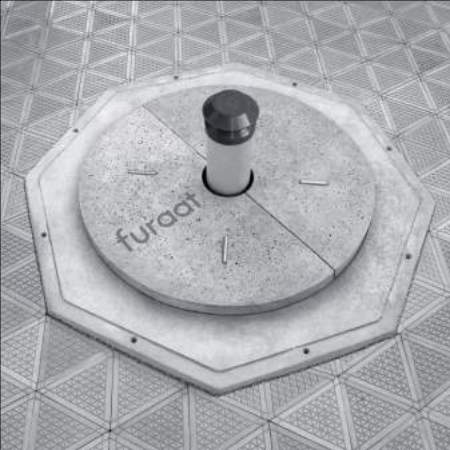
IT IS ADVISABLE WHILE HARVESTING SURFACE RUNOFF WATER TO HAVE HORIZONTAL FILTRATION MODULE SEPARATE FROM SAND FILTRATION MODULE, HOWEVER, IT IS POSSIBLE TO COMBINE BOTH UNITS IN ONE

RAINWATER FOR EARTH :

REGULAR RECHARGING OF DRIED AQUIFERS REJUVENATES EARTH

IDEAL SOLUTION FOR PREMISES WITHOUT STORM WATER DRAIN FACILITY/ WATER LOGGING

OPTION .01 RWE



RAINWATER FOR REUSE :

HIGH QUALITY WATER AT NEGLIGIBLE COST

BEST SUBSTITUTE TO CORPORATION WATER
SUPPLY

OPTION .02 RWR



RAINWATER FOR BORE WELL :

CONTINUOUS BORE WELL RECHARGING
IMPROVES WATER QUALITY (REDUCES T.D.S.)
OF BORE WELL

REGULAR RECHARGING OF AQUIFERS
RESTRICTS DEPLETION OF UNDERGROUND
WATER

OPTION .03 RWB

TOGETHER WE CAN RESOLVE WATER CRISIS

YOU HELPED US MOVE FORWARD WITH CONFIDENCE



APMC VADODARA



BLUE COAT SOLAN

OUR CLIENTS

BRANDS & NAMES ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS



COLOURTEX SURAT



GUJARAT ECO TEXTILE PARK SURAT

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HINDUSTAN UNILEVER DAMAN & KHALILABAD



J K PAPER SURAT

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JYOTI VADODARA



KHS MACHINERY AHMEDABAD

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L&T ECC DIVISION AHMEDABAD



NIRMA UNIVERSITY AHMEDABAD

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RATNAMANI METALS & TUBES AHMEDABAD



RSWM BHILWARA

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SEWA RURAL BHARUCH



GUJARAT SIDHEE CEMENT VERAVAL

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SOMA TEXTILES AHMEDABAD



TRANSPEK VADODARA

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TORRENT PHARMACEUTICALS MEHSANA



MUNICIPAL CORPORATION VADODARA

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WASMO KUTCH



ZYDUS MAYNE ONCOLOGY AHMEDABAD

OUR CLIENTS

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ABOVE :
R. AGARWAL'S BUNGALOW . AHMEDABAD

BELOW :
R. J. PARIKH'S BUNGALOW . AHMEDABAD

INSTALLATIONS



ABOVE :
GAUTAM ADANI'S BUNGALOW . AHMEDABAD

BELOW :
BIDIWALA'S BUNGALOW . AHMEDABAD

INSTALLATIONS



ABOVE :
D. C. GANDHI'S BUNGALOW . AHMEDABAD

BELOW :
VRAJ GARDENS . AHMEDABAD

INSTALLATIONS



ABOVE :
COCA COLA . AHMEDABAD

BELOW :
CADILA PHARMACEUTICALS . AHMEDABAD

INSTALLATIONS



ABOVE :
SHRI SWAMI NARAYAN GURUKUL . AHMEDABAD

BELOW :
POLICE BHAVAN . GANDHINAGAR

INSTALLATIONS



ABOVE :
JAIN DERASAR . SURAT

BELOW :
GOTRI ROAD . VADODARA

INSTALLATIONS

WE MUST USE OUR FINITE NATURAL RESOURCES WISELY

OUR CONSTANT EFFORTS TO PROMOTE RAINWATER HARVESTING AS A PROMISING SOLUTION



ABOVE:
BUILDING MATERIAL EXHIBITION
VADODARA 2006

BELOW:
STHAPATYA EXHIBITION . SURAT 2007

PROMOTION



ABOVE:
GUJARAT WATER RESOURCE MANAGEMENT
SEMINAR . AHMEDABAD 2007

BELOW :
AEC EXHIBITION . MUMBAI 2007


PROMOTION



ABOVE :
TRAINING WORKSHOP FOR SCHOOL
STUDENTS . CHENNAI 2007

BELOW :
LIVE DEMONSTRATION FOR ENGINEERING
STUDENTS . AHMEDABAD 2008

PROMOTION



rain is the primary source of drinkable water available on earth



LETS USE RAINWATER

