



OBERFIELDS

WHAT OUTDOOR LIVING SHOULD BE®

You can find these along with more detailed instructions on our website- oberfields.com/tech-downloads/

We can supply you with base materials, product, cleaners/sealers, furniture, lighting and more!

DIY CLINIC KEY NOTES

Tools:

Tape Measure

Marking Paint

Levels

Rotary Laser Level (if available)

Shovels

Rakes

String Lines

Powered Excavating Equipment

Vibrating Plate Compactor

3 lb. Steel Hammer

3-5 lb. Dead Blow Hammer

Rubber Mallet

Wheelbarrow

Marking Tools

Concrete Saw

Screed Pipes-1" thick straight steel pipe

Screed Boards-1x4 or 2x4 straight boards in wood

Trowel

4' Folding Layout Square

Chalk Line

Push Broom

Leaf Blower

Garden Hose

Low Pressure Sprayer

Band Cutters-Tin Snips/Large Scissors

Materials:

Paving Stones

Geo-Synthetic Underlayment Fabric

Base Stone-411's (we sell these)

Bedding Sand-Coarse Washed Sand or Stone Dust

Grade Stakes

Edge Restraint

Steel Spikes

Polymeric Sand

Paver Sealer

Paver Base Preparation:

Call 1-800-OUPS before you dig. Give at least 48 hours for them to mark your utilities.

Draw or lay out design. Patterns are easily downloaded from oberfields.com

Use string lines or boards for straight lines, and hoses or bendable pipe for curves.

Use marking paint to draw area to be excavated. Propose setting up furniture in area to determine fit.

Pay special attention to elevations:

Paver height at doorways

Existing elevation of turf

Consider drainage

Excavation:

Excavate beyond the finished paved edge by the depth of base.

Typical base stone depth is:

Walkways 4-6"

Patios 6"

Driveways 12" +

Typical excavated depth will be about 9" from finished paving elevation.

2 ½" for paver

1" for sand

6" for base stone

Grade Layout:

Establish positive flow away from buildings and structures.

Consider elevation next to doorways and where paving meets existing surfaces or turf.

Patios: 1/8"-1/4" per foot

Walkways: maximum ½"-3/4" per ft.

Grade Stake Layout:

Grade stakes should be set further away than 6" < screed pipes and boards

Grade stakes should be set at the height of base stone. This allows for easy excavation and installation of base stone.

Place screed pipes directly on grade stakes and bring base stone to bottom of grade stakes.

DO NOT use compaction equipment on top of set/installed grade stakes.

Spray grade stakes with marking to easily locate after they are set.

Base Stone Installation:

Compact sub grade before installing base stone.

Install base stone in 2" lifts and use plate compactor.

Use hand tamper in tight locations where larger compaction equipment cannot reach.

Typical installation is 2" lifts and 1 last lift to the top of grade stakes.

Set screed pipes on top of grade stakes to ensure proper base elevation.

Screed Bedding Sand:

Set screed pipes on top of grade stakes

Place screed boards on top of pipes

¾" to 1" of concrete bedding sand. Spread sand on top of, and in between, screed pipes.

*If installing select-cut travertine, please replace the concrete sand with 9's

Using screed pipes as a guide pull board across pipes to smooth large areas of sand.

Remove pipes as areas are complete.

Fill small voided areas with sand using a trowel

Install Pavers:

Start against a straight edge: house or other structure

Use string lines, layout squares, or straight edges (screed boards) to keep desired pattern square.

Install pavers by using the 'click and drop' method. Be sure if using multiple paver pallets, to pull from pallet vertically and from multiple pallets. This will ensure the best color blending.

Check for alignment using string lines. Use rubber mallet for alignment corrections.

Finish Edges:

Cut any pavers along curves or borders to fit.

All exposed edges, not touching a structure or other solid surface, require edge restraint.

Install edge restraint on top of base, NOT on top of bedding sand.

Clip edge restraint to go around curves and corners.

Typical Spikes Required:

Walkways: 1 spike every 18"

Patios: 1 spike every 12-18"

Driveways: 1 spike every 10-12"

Compact Paver Surface:

Run compactor over pavers to start interlocking process. Textured pavers require a buffer between the plate compactor and paver surface to prevent scuffing. DO NOT USE A PLATE COMPACTOR ON BANAS STONES, TRAVERTINE OR PORCELAIN PAVERS (IRONWOOD, QUARCITY, SILEX).

Run compactor starting in lowest elevation against direction of PF (i.e. run from turf edge towards the house/structure).

Polymeric Sand:

Spread polymeric sand and sweep into joints. Sweep at a 45 degree angle to paver joints for easier installation.

Sweep surface clean and run compactor over pavers.

Repeat sweep/compaction.

Use leaf blower to completely clean surface and even joints.

Once surface is completely clear, mist surface very lightly to activate the sand.

Mist sand before initial soak dries, this time a little heavier.

Retaining Wall Base Preparation:**Tools Required:**

Tape Measure

Marking Paint

Levels

Rotary Laser Level

Shovels

Rakes

String Lines

Powered Excavating Equipment

Vibrating Plate Compactor

3 lb. Steel Hammer

3-5 lb. Dead Blow Hammer

Rubber Mallet

Wheelbarrow

Marking Tools

Concrete Saw

Caulking Gun 10 oz or 28 oz

4' Folding Layout Square

Chalk Line

Push Broom

Leaf Blower

Garden Hose

Low Pressure Sprayer

Band Cutters-Tin Snips/Large Scissors

Materials Required:

SRW Units

Retaining Wall Cap Units

Specialty Units (corners, etc)

Geo-grid

Base Stone-3/4" minus

Bedding Sand-Coarse Washed Sand or Stone Dust

Drainage Stone-3/4" Clean Stone

Concrete Adhesive

SRW Pins

Drain Pipe/Outlets

Design:

Draw or layout design.

Use string lines or boards for straight lines, and hoses or bendable pipe for curves

Use marking paint to draw area to be excavated

Pay special attention to elevations:

Top of wall. Bottom of wall.

Height and use of wall.

Existing elevation of turf.

Consider drainage. Locate downspouts, gutter systems, impervious surfaces, etc.

Excavation:

Excavate to allow base stone, buried block course, and use of compaction equipment.

Typical base stone depth is 6"

Typical base trench is 24" wide

Typical excavated depth will be about:

12" from finished elevation

6" for buried block

Up to 1" for sand

6" for base stone

Compaction:

Compact sub grade before installation base stone

Install base stone in 2" lifts and use plate compactor

Use hand tamper in tight locations where larger compaction equipment cannot reach.

Compact drainage stone and backfill

Compact soil in front of the wall

Base Course Installation:

Start at lowest elevation

Level front to back and side to side

Use 4' minimum length level

Step up base course when possible

Check alignment along the back (smooth edge) of SRW units

Drainage Stone:

Drainage pipe higher than finished grade in front of wall

Outlet every 35'-40' along wall

Drainage stone should be minimum 12" behind the wall

Drainage stone should NOT see daylight at top of the wall

Soil cap on drainage 8-12"

Stacking Wall Courses:

Stack stacking at any outside corners first. If no corners, start near structure/building.

Maintain desired bond-minimum 3'4"

Ensure gravel fill is level with or slightly below installed SRW units. Clean off debris.

Set next course of SRW units with units aligned for setback.

If Versa-Lok, install pins. 2 pins per block, with each pin going into a different block below. Cut units to fit.

If another wall system that is simply stacked and glue, put two beads of glue per block and adhere together.

Back Fill Compaction:

After stacking each course of wall, backfill and compact.

Compact parallel to the wall face.

Start compaction at the wall and go back into the backfill soil area

Reminder: minimum 12" drainage stone

Geo-Grid Installation:

For taller walls, higher than 4' tall, or walls with more loads, geo-grid is required.

Geo-grid strength should be installed perpendicular to wall face.

Flat installation. No ridges or wrinkles.

Geo-grid should not overlap.

Install 2" from wall face in-between block courses

Minimum 3-4" of soil between layers.

6" of soil on top before compaction.

Cap Installation:

Caps can be installed flush, set back or with a slight overhang.

Use string line along back of units.

¼" bead of adhesive a couple of inches from the back and front of SRW unit required.

Cut or split units to fit.

There are many capping options, including precast caps. Please check our website for ideas.

Tiered Walls:

To ensure the upper wall does not load the lower wall, the distance between the walls should be 2x the height of the lower wall.

If the walls must be constructed closer, engineering review of the wall systems may be required.