CROUCH RECREATIONAL DESIGN, INC.
SUPERVISED INSTALL REQUIREMENTS

PRE-INSTALLATION/SUPERVISION REQUIREMENTS:

1. Locate Underground Utilities (gas, water, electric, phone, cable, sprinkler, etc.)
2. Proper Protective Area/Ground Space Required Is Dug Out To The Proper Depth With No More Than 2% Grade Or Flatter…Check With The Sales Representative For Dimensions.
3. Know the Ground Conditions (i.e. clay, sand, rocky, older footings, etc.)
4. Storage Area for Equipment and Means of Transportation to Job Site.
5. Access for Heavy Equipment (trucks, crane, skid loader, etc.)
6. Any Existing Resilient Surfacing Must Be Removed From The Installation Site (Sand, wood chips, pea gravel)
7. Footing Holes Must Be Dug Day Prior To Supervisions…Center Stage Footing Pads Must Be Poured Day Prior To Supervisions…

TOOL LIST:

1. Generator or Power Source – Electrical Cords Able To Reach Work Site.
2. _" To _" Plywood Cut Into 8" x 8" Squares – One Per Footing Hole.
3. Transit Level – For Shooting Footing Holes.
4. Shovels, Post Hole Diggers, Picks, And/Or Skid loader With Auger – 12" & 18" Bits.
   Note: Footing Holes Are To Be Dug Out Day Prior To Supervision…
5. Tamper For Compacting Dirt.
6. Wheelbarrow(s) For Concrete Pour
7. Stepladder(s) – 6' & 8'.
8. Crane/Cherrypicker/Front-End Loader Able To Lift Over 20' – Required For Any Slides Over 9' Tall And Any Tree-House Hex Roof(s). Check with Sales Representative for Slide Heights/Roofs.
9. Concrete – Needed After All Equipment Is Up. Check with Supervisor for Delivery Schedule/Quantities.

PLEASE NOTE:
Crouch/Churchich Recreational Design, Inc. Supervisions are done by Mike Wendt. *We ask that you contact Mike Wendt (402) 670-0783 the night before a scheduled Supervision as to give them any needed directions and/or update them on any potential problems (weather, site problems / conditions, detours, etc.)…*

Supervisions are generally done on a Saturday @ 8:00 am. We provide a factory trained /certified installer to *Supervise* (6-10) skilled adult male volunteers with tools. The pre-ground preparation, drilling of the footing holes, proper number of volunteers and tools are *requirements*… Deviations from any of these requirements will result in extra fees…

Supervisions are $650.00 per (1) eight-hour workday. Any Supervision outside of a 200-mile radius of Omaha requires .35/mile one-way. Any Supervision requiring an overnight stay we ask that you provide the Supervisor with a hotel room. Generally lunch and bathroom facilities are provided for the supervisor/volunteers. As a "rule of thumb" with good weather conditions, and proper pre-supervision & volunteer/tool requirements met, your volunteers should be able to install $20,000 – $25,000 of equipment in a day!

HAND TOOLS:

- **Please note**: One set of tools for every four volunteers…i.e. 12 volunteers = 3 sets of tools.
- Ratchet/Socket Wrenches
- Open end wrenches - up to _"
- Torx Head wrenches & sockets (T-27, T-30, T-45, T-55) Carried @ NAPA
- _" Power Drills with metal drill bits – up to 9/16"

- Tape Measurers
- Levels (9" magnetic, 2' & 4')
- Vice grips & C-Clamps
- Drift Pins/Alignment Punches
- Utility Knives
- Hammers/Sledges – Standard & Rubber
- Screwdrivers
- Cordless Drills with 3" Tip Extensions
- 3/8" Nut Driver For Drills
- 3/8" Coarse Thread Tap (16 Threads Per Inch)

SUPPLIES:

- Two 4' x 8' Sheets of _" Plywood: these will be used to make two tables near the construction site.
- Saw Horses: two sets will be used for the tables two additional sets may be needed.
- Upside Down Orange Spray Paint: ask for "marking paint" 3-4 cans.
- Caution Tape or Snow Fences: to go around your structure at the end of each day until you have completed the job.
- 2' x 4's: Two 8' long for each 3', 4' or 5' high decks, Two 10' long for 6' or 6'6" high deck, Two 12' long for each 8' high deck.
- Wood Stakes: for holding bracing in place. 1" x 2" x 18", One for each 2' x 4' plus 6 extras.
- Heavy Duty Extension Cords: at least two, long enough to reach from the source of electricity to the work area.
- Ziploc Bags: for sorting nuts and bolts, quart and pintsize.
- Liquid Hand Soap: to soak nylock nuts in prior to use. This will help insure that they do not freeze up when they are tightened.
- Hardware (nail aprons): Home Depot or your local lumberyard will usually donate these to you if you explain what you need them for.
- Restroom Access (portable if necessary)

HOW TO FIGURE THE AMOUNT OF CONCRETE YOU WILL NEED

Match the letter next to the hole on your footing layout with the footing schedule on the "Footing Information" page. This will tell you the size of footing. Count the number of each of the different size footing you have on your footing layout. Use the following table to determine the number of 80lb. Bags of Ready Mix concrete you will need. GRAVEL MIX, NOT SAND MIX.

- 18" dia. footing=3 bags of Ready Mix per footing.
- 12" dia. footing=2 bags of Ready Mix per footing.
- 20" dia. footing=6-7 bags of Ready Mix per footing.

To convert the number of bags to cubic yards, use the following formula: the number of bags x .625/27=cubic yards.

PLAYGROUND EQUIPMENT INSTALLATION PROCEDURE

STEP ONE

- If excavation is required it should be done as close to your install date as possible.
- If underground drainage is required it should be installed after the site is excavated and before the equipment is installed.

STEP TWO

- If your structure includes a “Center Stage” a concrete footing must be poured 2 days before the actual installation begins.
- Installation of the equipment will begin in the excavated area; footings will be laid out and dug. Posts and decks will be erected, concrete will be poured in the footing holes and you are ready for step three.

STEP THREE

- If filter fabric is going to be spread prior to the spreading of pea gravel or wood fiber it should be done before you install your border, (i.e.: landscape timbers, earthen berm, concrete, etc.). Use the border to hold the outside of your fabric down.
- Leaving an opening in your border will allow you to move your pea gravel and or wood fiber into the protected area. Once you have all your protective surfacing in place, close off the opening in your border.
- Keep in mind that the border is used to contain your pea gravel and wood fiber. If you choose not to install a border around the protective area your protective surface will spread and require you to constantly add material to your safety surface.