Water Feature Note:
Install Water Feature and accessories as per manufacturer’s installation instructions and local codes. Plan electrical service prior to construction. notch out block units as needed for the accessory cords to exit the back of the water feature for connection to planned electrical service.

You will need:
- 83 - 16"/14"w Large Stonegate units
- 76 - 12"/10"w Medium Stonegate units
- 85 -6"/4"w Small Stonegate units
- 63 - 12"/10"w Country Manor/Stonegate Cap units
- Leveling Pad Material - 31.7 cf
- Tub Base Fill - 7 cf
- Column Fill Material - 4.2 cf
- Keystone Interlocking Shouldered Pins* (approx. 350)
- Exterior Grade Concrete Adhesive
- Illumifalls™ 12" Smartfall & Waterkit Shown:
  Model #: AJSB12K

Notes:
- All Keystone Stonegate units are 6"h x 10"d.
- Keystone recommends the use of its interlocking pins when alignment allows. Use pins in conjunction with concrete adhesive to maximize stability of your structure.

Outdoor Water Feature Kit Placement:
Outdoor Water Feature may be placed directly on a stable patio surface or be supported by a concrete or crushed stone leveling pad below grade. Below grade leveling pad shown here. Adjust height as desired. Add courses below grade if required.
General Note:
In consideration of freeze/thaw issues during the cold weather season it is recommended that this outdoor Water Feature element be protected from rain, snow and ice as necessary.
After selecting the location of the project, excavate the base trench (according to the dimensions in the plan below). Do not use this excavated material as backfill. Remove all surface vegetation and debris. Start the leveling pad at the lowest elevation. Level the prepared base with 6" of well-compacted granular fill (ex. gravel, road base, or 1/2" to 3/4" [10 - 20 mm] crushed stone). Compact. Do not use PEA GRAVEL or SAND for leveling pad.

Remember to:
• Call 811 to locate utility lines prior to digging.
• Follow manufacturer’s instructions and local codes pertaining to electrical and water installation elements.
2nd Course Isometric

Fill Center of Column w/Drainage. Fill Material at Each Course to Support Center Column Capping Units. Consolidate Fill by Hand Tamping (Both Sides).

Water Feature Tub Base Fill
Fill this Course w/Drainage Fill Material. Consolidate Fill by Hand Tamping.

2nd Course Plan

30" Column  
20" Wall  
70" Water Feature/Tub Wall  
20" Wall  
30" Column  

60"

30" Column  
10"  
30" Tub Wall  
10"

20" Water Feature  
30" Tub Wall  
30" Column
3rd Course Isometric

Fill Center of Column w/Drainage Fill Material at Each Course to Support Center Column Capping Units. Consolidate Fill by Hand Tamping (Both Sides).

Water Feature Tub Base Fill Below

2nd Course Below

3rd Course Plan

30" Column  20" Wall  70" Water Feature/Tub Wall  20" Wall  30" Column

30" Column  10"  30" Tub Wall  30" Tub Wall  30" Column

60"  20" Water Feature
4th Course Isometric

Cut Units for Water Tubing and Accessory Cords as Needed. (See Block Water Tubing Cutting Note / Detail.)

3rd Course Below

Water Feature Tub Base Fill Below

Block Water Tubing Cutting Note:
Prior to installing tub and water tubing, use them to locate where to notch block. Using a concrete saw or wheel grinder tool w/masonry disk, notch out the top of blocks to place water tubing into so water tubing is flush or just below the top surface of the cut blocks. Allow extra room in notches for tubing to move or bend as well as room for the accessory cords as needed.

Block unit areas to be cut are labeled with angular hatching.

Cut Unit for Water Tubing (2 of 3 Cut Blocks Shown).

Notch Out Top of Block to Make Room for Water Tubing and Accessory Cords as Needed. (See Block Water Tubing Cutting Note.)

Block Water Tubing Cutting Detail

Fill Center of Column w/Drainage Fill Material at Each Course to Support Center Column Capping Units. Consolidate Fill by Hand Tamping (Both Sides).

4th Course Plan

Water Feature Tub Base Fill Below
Tub Placement Note:
Prior to final placement of the water feature tub, verify that the tub lip is level with the top of the 4th course blocks, or at other desired height. Remove or add tub base fill as needed for final placement height. Center tub in water feature tub area prior to placing tub area fill around the tub.

Tub Area Fill Note:
After installing the tub, fill around the tub with desired fill material. If backfilling with dirt or other organic material place geotextile fabric or equal around the back side of the tub wall blocks inside of the tub area to prevent the dirt or organic material from washing through the block joints to the outside.
Cap Unit Note:
Cap units to be cut or hard split are labeled with angular hatching.

Hard split all exposed perimeter cap units labeled "split" cap units and soften the outside edges of the hard split "split" cap units using a mason's hammer to match the cap units tumbled edges. Saw cut all other interior "cut" cap units.
**5th Course Isometric**

- **Block Water Tubing Cutting Note:**
  Prior to installing block cut unit, using a concrete saw or wheel grinder tool with masonry disk, notch out the blocks to place water tubing through the cut blocks. Place cut block unit in position with water tubing going through the cut block unit notch area. Allow extra room in notch for tubing to move or bend as well as room for accessory cords as needed.

- Block unit areas to be cut are labeled with angular hatching.

- **Cut Unit for Water Tubing.**

- **Notch Out Side of Block to Make Room for Water Tubing and Accessory Cords as Needed.** (See Block Water Tubing Cutting Note.)

**5th Course Plan**

- **Water Feature Note:**
  Install Water Feature and accessories as per manufacturers installation instructions.

- **Fill Center of Column w/Drainage Fill Material at Each Course to Support Center Column Capping Units. Consolidate Fill by Hand Tamping (Both Sides).**
Water Feature Note:
Install Water Feature and accessories as per manufacturers installation instructions.

Block Water Spillway Cutting Note:
Prior to installing the block cut units and spillway, using a concrete saw or wheel grinder tool w/masonry disk, notch out the top and or side of blocks to place water tubing and spillway into. Allow extra room in notches for tubing to move or bend as well as room for accessory cords as needed. Cut into the top of the rear blocks deep enough to set the front of the spillway in contact with the top of the front blocks.

Block unit areas to be cut are labeled with angular hatching.

Cut Unit for Tubing and Spillway.

Notch Out Top and or Side of Block to Make Room for Tubing and or Spillway Above and Accessory Cords as Needed. (See Block Water Spillway Cutting Note.)

Block Water Spillway Cutting Detail

6th Course Isometric

5th Course Column Below (Both Sides)

Water Feature Tub Area Below

6th Course Plan

30" Column

20" Wall Below

70" Water Feature

Cut Units for Water Tubing, Spillway and Accessory Cords as Needed. (See Block Water Spillway Cutting Note / Detail.)

4th Course Wall Capping Below (Both Sides)

20" Water Feature

Water Feature Tub Area Below

4th Course Tub Wall Capping Below

Fill Center of Column w/Drainage Fill Material at Each Course to Support Center Column Capping Units. Consolidate Fill by Hand Tamping (Both Sides).
Cap Unit Note:
Cap units to be cut or hard split are labeled with angular hatching.
Hard split all exposed perimeter cap units labeled "split" cap units and soften the outside edges of the hard split "split" cap units using a mason's hammer to match the cap units tumbled edges. Saw cut all other interior "cut" cap units.
Water Feature Note:
Install Water Feature and accessories as per manufacturers installation instructions.

Block Water Spillway Cutting Note:
After installing the water tubing and spillway, using a concrete saw or wheel grinder tool w/masonry disk, notch out the bottom of front and back blocks enough to place over spillway and set flush to 6th course below. For best appearance make front outside notches close to spillway.

Block unit areas to be cut are labeled with angular hatching.

7th Course Plan

4th Course Wall Capping Below (Both Sides)
Water Feature Tub Area Below
4th Course Tub Wall Capping Below
Cap Unit Note:
Cap units to be cut or hard split are labeled with angular hatching.

Hard split all exposed perimeter cap units labeled "split" cap units and soften the outside edges of the hard split "split" cap units using a mason’s hammer to match the cap units tumbled edges. Saw cut all other interior "cut" cap units.