

# Rain Chains

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There is a certain magic in the sound of falling rain, especially for those of us who live in arid climates where rain events are eagerly anticipated. Who amongst us has not stepped out on the porch to witness the first rain of the monsoons or inhaled deeply to better enjoy the distinctive fragrance of rain-soaked air? Our appreciation of rain, along with our growing awareness of the need to use our water resources more wisely, has led many of us to rediscover the concept of rainwater harvesting. From creating simple earthworks to installing cisterns, one thing that most people agree upon is that the aesthetics of the design are a consideration. To that end, you may want to consider installing a 'kusari doi' (meaning rain chain), to enhance your enjoyment of the rainfall as well as to create a unique look for your system.

Rain chains were introduced to the United States from Japan about ten years ago. Functional as well as architectural, these devices provide an alternative to closed downspouts typically used with a rain gutter system and are more like water features. Water is directed away from the rooftop in a musical cascade down the chain and into a rain barrel or cistern. In some systems, where water storage isn't desired or practical, the rain chain can be used to simply slow the water flow and direct it to a catch basin, such as a decorative pot or bowl, or onto a paver to help prevent erosion at the downpour site.

Given their decorative nature, rain chains are often placed where they can be observed – and heard – during a rain event. And while not all situations are conducive to use of a rain chain, especially if the eaves don't overhang far enough to keep the chain off the house's wall, there are many instances in which rain chains can visually enhance the look of a water management system and add unique distinction to the overall design.

In its simplest, most traditional form, a rain chain is just that – a chain commonly constructed of copper or brass. The styles range from simple single links to elaborate, multiple interlocking links. The optimal length will extend to just above the storage container or ground level, but can be any length desired. Commercially available rain chains are usually sold by the lineal foot but many, especially the more artistic or detailed styles, are often sold only in predetermined lengths. Additional lengths can often be added to achieve the desired effect.

With the link style, splattering is very common and can be problematic if installed near doors, windows, and walkways. Keep in mind that rain chains, as opposed to downspouts, are more of an aesthetic enhancement used to direct water and are not ideal for capturing water. In the strictest Japanese tradition, kusari doi are considered "kinetic sculptures" and provide "water music" which promotes peace and tranquility. Many Japanese temples and gardens are adorned with rain chains.

Another style of rain chain is the "cupped" design. Wider at the top than the open base, the cups are often fluted or scalloped and are connected by links of chain to each other, acting as funnels by channeling water from the top of the chain to the bottom. Cupped rain chains are



more decorative (and usually more expensive) than their link counterparts but are also more efficient in capturing and directing water. Cupped chains can be used in areas where splashing considerations must be taken into account, even in heavy rainfall. As they hold water, albeit temporarily, they'll add considerable weight to the gutter during a downpour. With water weighing nearly 8 lbs per gallon, it is important to keep the weight holding capacity of the gutter in mind, and realize that the gutter will also be holding water. The choice of style incorporated in the system will depend on the desired function and taste of the individual, but the overall effect is an aesthetically pleasing enhancement to a typical gutter and downspout system.

Regardless of the style, unless the construction material (usually metal) is significantly heavy, the chains are often anchored to keep them from swaying. Extra lengths of chain can be coiled in the bottom of the catch basin or the last link in the chain can be connected to a loop stemming from the bottom of the basin.

As for choice of construction materials, copper and brass are most common but rain chains made from aluminum, iron, galvanized and other materials are also available. Because metals will leach into the rainwater and may make the water toxic to wildlife, consider rain chains with care if used with water features such as ponds or birdbaths. As the metals age, weathering processes will change the look of the rain chain unless they are treated or cleaned periodically. The natural ageing effects add to the appeal of the rain chain and should be considered for the overall "feel" of the system and its surrounding environs.

In addition to function, placement, style, and material, the last consideration is installation. If the structure doesn't have eaves or an overhang of sufficient depth (about 3') a bracket can be attached to the wall to extend the chain away from the structure. If a gutter and downspout is already in place, the downspout can be removed and the chain can be attached to a spacer bar or clip in the gutter to span the downspout hole.

A word of caution: Remember the rule about not mixing metals? Keep yellow to yellow and silver to silver. Don't directly attach a copper clip to an aluminum gutter. If you do, electrolysis could result. Instead, cover the metallic parts that come in contact with each other. Plastic sleeves, rubber coatings, or some other non-conductive barrier between the two mixed metals are all that is needed.

The last step of the installation is to simply hang the rain chain and then listen for the rhythm of the falling rain... 🎵 🎶

