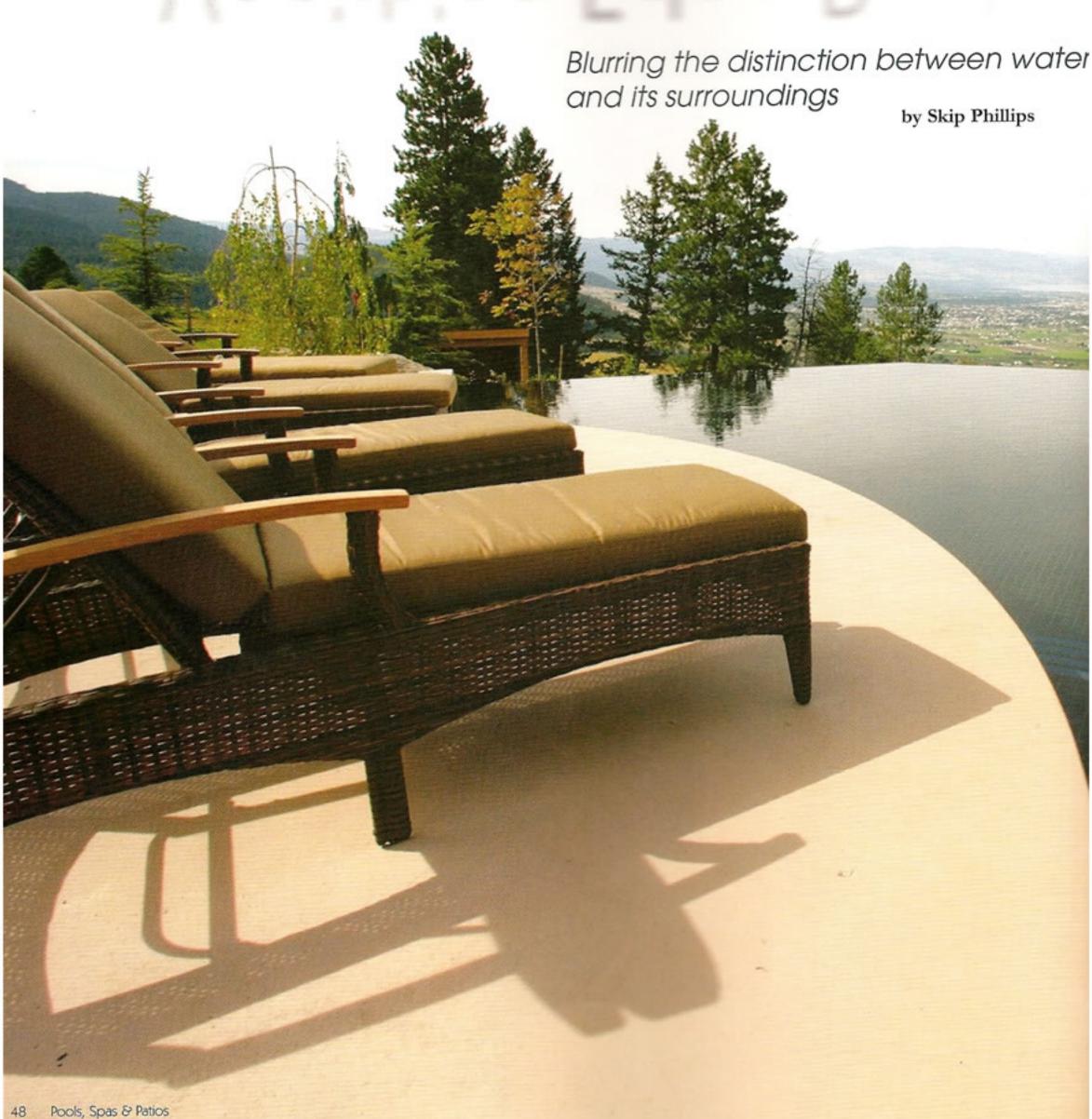
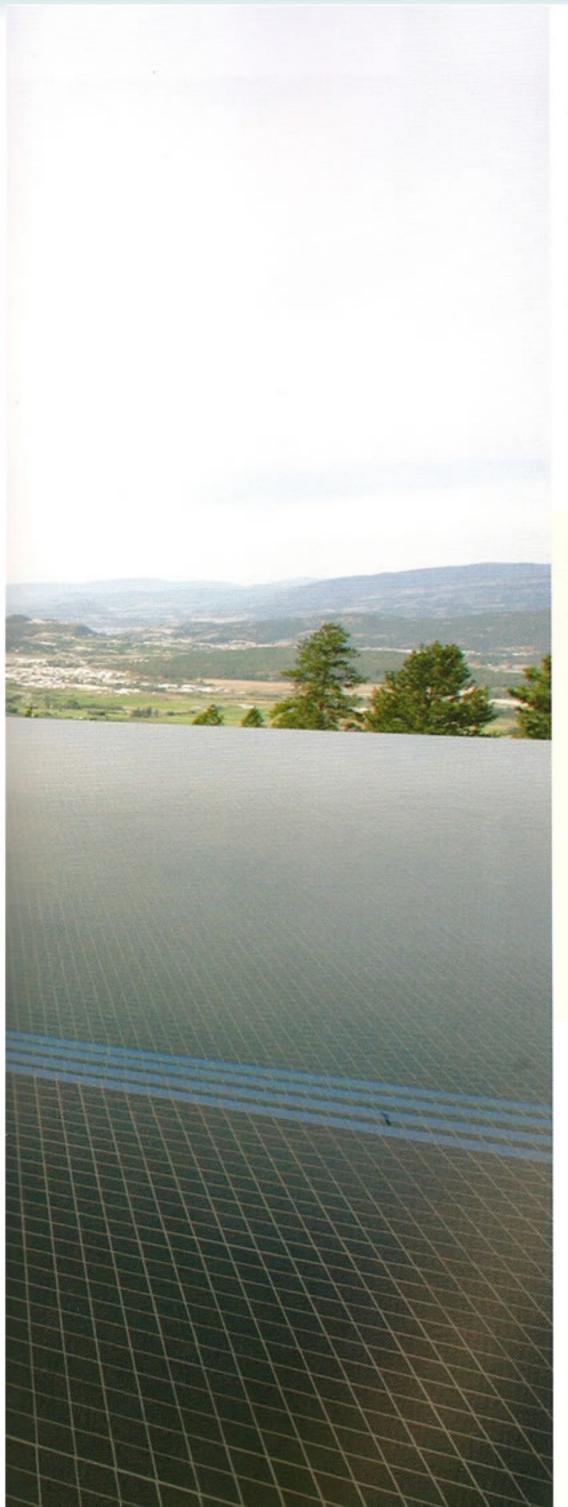
## Vanishing Edge Pools





hile there has been a recent surge of interest in vanishing edge pools (also called 'disappearing edge' or 'infinity' pools) in all of its variations, better known as 'water in transit', this dramatic design style itself has a long history.

The first vanishing edge pools were designed and built in France in the late 1800s. In North America, the first vanishing edge pools were built in the late 1950s in Los Angeles, and were designed by the world renowned architect, John Lautner. Movie fans may recall the movie 'Diamonds Are Forever', released in 1971, where a Lautner pool design was used and may have been one of the first vanishing edge pools most people had seen.

## Resorts In The Caribbean & Mexico Have Fueled The Exposure

Resorts, frequented in the Caribbean and Mexico in particular, have fueled the exposure of vanishing edge design, and it is currently difficult to find any high profile property that does not have a water in transit detail of some kind. The Jade Mountain Resort in St. Lucia, owned by Canadian Nick Troubetzkoy, is a great example of vanishing edge design, where water makes a seamless transition from the pool to the Caribbean Sea and the horizon beyond.

The premise of vanishing edges, and pool design in general, has been misunderstood. This particular edge detail results in blurring the distinction between the water and its surroundings, and is not restricted to areas with large vertical drops or 'water to water' views.

Vessels with modified water/deck relationships (perimeter overflow pools, both elevated and flush with the deck) as well as vanishing edges create highly reflective bodies of water, heightening their appeal for people who do not swim, as well as for people who use the pool for exercise. Canada has tremendous potential for landscape reflectivity, which I believe is the most important facet of the end result.

## Design Criteria Relevant To The Backyard Environment

The design criteria relevant to the backyard environment (rhythm, balance, colour, texture, elevation and proper proportions) are the same for all concepts whether they have a water in transit function or not. However, a 'line of sight' section should be incorporated in the design to insure you actually see the result that you anticipate.

Left: The relationship between people and the pool edge detail are paramount as is shown by the location of the lounge chairs beside this vanishing edge pool by Valley Pools – Kelowna, British Columbia.



Reflections are the most important facet of any water design. Valley Pools - Kelowna, British Columbia.

There are unlimited variations of water in transit design, however, the responsibilities of the designer and builder are amplified. Mechanical details that are often overlooked can be catastrophic, and the structural responsibilities of these pools can be subject to additional "loading" criteria.

## Design Based On Knowledge Of Physics And Hydraulics

Fundamentally, the mechanical criteria that makes a water in transit design function properly is based on a basic knowledge of physics and hydraulics.

The pool vessel will have a portion (or all) of its perimeter that overflows, so an attached or detached surge tank will be incorporated to accept the bather surge or wind displacement that will inevitably occur.

As an example, a 74 sq m (800 sq. ft.) swimming pool needs at least 3,785 L (1,000 gal.), or 5 cm (2 in.) of the surface level, of freeboard in the surge

A Canadian client's pool in La Jolla, California, overflows over two, 90 degree corners, with two flush fire pits alongside the pool. tank, in addition to the minimum operating level. There should always be a dedicated pump and filter for the vanishing edge system, with the systems located at or below their source. It is paramount that devices are in place to positively insure against equalization between the surge tank and pool. An autofill and overflow line in the surge tank are also prerequisites.



The flow rates over the edge are based on edge tolerance and the desired effect, whether from the pool deck level or perhaps a destination at the base of the vanishing wall.

In Canada, there is a subtle shift in the premise that swimming pools are only to be enjoyed in the summer, while spending several months of the year covered, unsightly and unusable.

Most pools have their largest impact visually, so the decision to keep the swimming pool operating above freezing temperatures year round dramatically increases the amount of time it can be used. Vanishing edge pools can also be installed with automatic pool covers.

I find Canadians are increasingly more likely to embrace the outdoor living 'destination' (fire, food, and water) that we focus on in all of our swimming pool designs. The possibilities for these design details on both interior and exterior swimming pools are endless.



Above: This pool and spa combination with a vanishing edge in the snow is a prime example of how important wintertime visual effects can be. Pool: Valley Pools – Kelowna, British Columbia.

Skip Phillips is the owner of Questar Pools, a design/build firm in Escondido, California. He has been named multiple times the most influential pool designer in the world, and has taught vanishing edge design and hydraulics to the pool and spa industry for 17 years. Profiled on HGTV and a multitude of consumer publications, Skip has a design work permit in Canada in conjunction with Valley Pools of Kelowna, British Columbia.

