

Water Damage: Reducing Risk In the High Net Worth Market

White Paper by Water Security Solutions, LLC



Introduction

According to the Insurance Institute for Business and Home Safety (IIBHS), plumbing supply failures are the #1 source of residential water damage and cost 48% more in total payouts than the second most common source. Water damage is substantially more common than fire damage and burglaries, yet smoke and intrusion alarms are everywhere while water leak alarms are still struggling to gain exposure. This is surprising considering that if a ¾" water line in a house bursts, it can fill a home with the same amount of water as an average backyard pool in just 24 hours. Even the flow from a washing machine hose or toilet supply line can cause devastating damage to your average home if not caught quickly. In high-end properties with more appliances and where water lines are typically from 1" to 2" in diameter, the water flow can be much greater and so too can the damage. In these homes, you also risk loss of wine or art collections, designer wardrobes, antiques, exotic floors and finishes as well as fine furnishings. On top of this, there will likely be additional living expenses to cover while the home is uninhabitable during remediation and reconstruction.

With very little effort and an internet search, you can easily find the many well-documented steps homeowners can take to reduce the risk of freezing pipes. It is much harder however to avoid pinhole leaks, burst pipes, appliance failures and other causes which account for 82% of plumbing related water damage according to an IIBHS report. Manually shutting off the water while the house is vacant is a good idea but it is not an adequate preventative measure for water damage nor does it meet the underwriting requirements for the insurance carriers for several reasons:

- 💧 Users may forget or choose not to shut off the water on any given occasion.
- 💧 Large leaks occur and cause extensive damage while the house is occupied but the occupants are asleep or far enough away from the leak that it continues for hours undiscovered.
- 💧 Small leaks can go on for months in walls or other locations out of sight where they slowly rot away structure and foster toxic mold growth.

Some homeowners, (particularly in the HNW market), also find that shutting off the water is not an option if the house is not being completely winterized. Many expect their house to be ready at a moments notice so the heating boiler, humidifiers or icemakers remain on while the house is vacant for long stretches of time and those appliances need access to water. These are some of the reasons why the greatest reduction in exposure to water damage is to install a water security system that automatically shuts off the water if a leak is detected. At an average cost of about \$2500 installed, these systems may seem rather expensive but when you do the math, it is clear that the cost of not installing one is substantially more.

Why are so few water security systems installed?

Awareness, fear, price and attitude are the biggest obstacles. Product awareness among homeowners and the plumbers who need to install them is very low. In the USA alone, for residential use, there are currently at least 4 turnkey types of flow-based water security systems that monitor water flow for leaks, and 10 sensor-based systems that detect water on

the floor with moisture sensors. These are aside from all of the alarm supply store options that can be custom assembled with the right components. Some plumbers or alarm installers are familiar with one type of system and tend to install that system out of personal preference, profit margin or convenience. In many cases however, it is not the best fit for the homeowner or is missing some critical element that is required for optimal protection under that home's unique plumbing risk profile.

Fear of the technology or negative comments from their plumber or contractor will keep some people from installing a system. There are a lot of factors that need to be considered regarding user lifestyle and plumbing configuration before you install or program the settings for a flow based water security system. Inexperienced installers have historically left customers in some frustrating situations that have led to resentment toward the technology for both the installers and their customers. Without a knowledgeable resource to go to for troubleshooting, homeowners have often disabled the system or had it removed because the wrong system was installed or it was installed improperly. These negative experiences have caused some plumbers to intentionally scare homeowners out of installing so they won't have to deal with any potential callbacks.

Price and attitude usually go hand in hand. Some people simply won't spend the money it costs to install because they believe that, "It won't happen to me," or "That is what I have insurance for." More insurance companies are starting to require them to bind coverage or renew policies where a water damage claim was reported, or to offset exposure to other risks. For this reason, the market is increasing slightly and awareness is picking up but it is still a long way from its potential. As the insurance industry begins to demand these systems more and the market gets stronger, manufacturers will develop the economies of scale necessary to reduce prices thereby making them more appealing and available to a larger customer base.

Even if you get past those issues, it is still hard for some clients to choose which system is right for them. They have no knowledge of what the different systems have to offer, how living with a system will affect their life or interact with their plumbing, nor do they know what specific levels of protection are required to satisfy their insurance company. With this indecision comes lack of action. Since there are so few plumbers who know about any of these systems, never mind all of them, there is little to no objective help homeowners can get with the education they need. This education is crucial for them to feel sufficiently informed to make a decision and then get a technically sound installation that is compatible with their, budget, plumbing, lifestyle and insurance requirements.

Overcoming the obstacles

Awareness: Insurance companies are in the best position to see the reduced risk and potential for loss control that these systems provide. By analyzing the per-incident and annual cost as well as frequency and specific sources of plumbing related water damage, the importance of addressing this issue becomes obvious. Seeing the benefits creates the greatest incentive for increasing awareness of these solutions and motivating homeowners to appreciate and use the technology through incentives or requirements.

Fear: Unless a homeowner has actually experienced the trauma of major water damage, their motivation to go to the expense and trouble of arranging a water security system installation is typically low. The fear of inconvenience or of the unknown is something that can prevent many from protecting their homes from plumbing leaks. It is only through pre-installation property assessments and education of homeowners and plumbers, that the causes of potential issues can be identified early and a plan to avoid them can be designed. Each installation is unique and addressing them as such from the start with a property assessment and educational consultation can foster the communication channels necessary to quell the fears of clients and installers.

Price: Price is usually less of an issue after water damage since the homeowner is now either eligible to have the device paid for by a claim allowance with some carriers, or now realizes the value of such technology. When they start to compare the cost of the system against their deductible, premium increases, irreplaceable heirlooms and the inconvenience of remediation or being non-renewed, they see the expense (if any) as a worthwhile investment. When they are footing the full bill for a system themselves without having suffered a loss, they often compare any policy credits available against the cost of the system to calculate the return on their investment. Unfortunately, the lavish homes of HNW clients often tempt high product markups and overbidding from some service professionals, which can lead to inflated project costs. While the HNW may be perceived as being able to afford it, they are not necessarily willing to afford it, especially if it negatively impacts their ROI. To help keep the ROI appealing, it is beneficial to have an unbiased third-party analysis of labor costs for similar work, along with reliable product discounts for policyholders.

Attitude: While a homeowner's attitude towards water security can drastically change for the better after a water damage claim, the goal should be to reach this state of mind before a loss occurs. This can be done best by the broker or risk manager whom the policyholder often trusts to advise them best on their specific risk management needs. Changing homeowner's attitudes starts by giving them insight on the likelihood of water damage as well as the financial and emotional consequences of having a claim including full deductible payout and the potential for premium hikes or non-renewal. Escaping to another carrier after non-renewal is not so easy either as many insurance companies are starting to require them to install a water security system anyway before covering the risk.

Making it all happen

Water security systems do require professional plumbing knowledge to install but equally important and extremely rare is a solid understanding of their technical intricacies. How they will perform in a given plumbing system and residential environment where the users may need to interact with them on an annual if not daily basis, is critical pre-installation knowledge. While these systems become part of the home's plumbing configuration, they are nothing like other household plumbing appliances and require a greater level of consideration and understanding than simply installing a hot water heater or toilet. This level of understanding is best acquired through years of fulltime experience working exclusively with water security systems all over the country from a wide variety of manufacturers. So many factors affect which systems are best suited to a particular home. These include but are not limited to:

- 💧 The size and accessibility of the incoming water line
- 💧 Irrigation, fire suppression or automatic pool filling branch lines
- 💧 Type, number and location of water drawing appliances and fixtures
- 💧 How the home is used at different times of the day or year
- 💧 User preference for feature-rich versus simpler user experience
- 💧 Maintenance requirements
- 💧 Customer budget
- 💧 Cost to install optimally under existing conditions including auxiliary support devices
- 💧 Underwriting requirements that need to be met

Demand for water security systems is scant, preventing the market from being robust enough to support local vendors throughout the country who specialize in water security. Working so sporadically in this industry makes it difficult to acquire or maintain the knowledge necessary to assess homes and competently educate customers on a variety of options and the implications for each. Therefore, in order to collect this assessment information, it is necessary for a specialist who possesses all of the current knowledge to guide local plumbers on what characteristics need to be identified in the home on a per case basis to narrow the options. Once the homeowners have been given feedback on the results of the assessment analysis, they can make an informed decision about what to install. The specialist must then guide the installer on which components need to be installed and in what configuration to achieve optimal home protection, system functioning and client satisfaction.

Installation Quality Control

High-end homes can offer complexities that make designing the appropriate water security system too challenging for an inexperienced installer. This goes double for HNW homeowners who rarely have the time or inclination to do all the necessary research to make sure they are getting what they need. Even when an installer is aware of one particular system and the homeowner believes it is a good fit, there are still frequent misunderstandings that affect installation quality. The level of protection the carrier, broker and client believe the home is getting, and the level of protection it actually gets based on how the system was applied to that house, can be very different. This is why it is also important to have post-installation certification done by a specialist who understands the requirements set by the carriers, the proper functioning of each system and the property's plumbing risk profile. Some examples of why this is important include:

- 💧 Homeowner or installer may install only 4 water sensors even if 12 are needed to monitor all their water-drawing appliances, and assume they are fully protected as required because they installed an "approved system"
- 💧 Some installers position water sensors an inch or higher off the floor so the room/house would have to flood that high before the system would alarm
- 💧 If installed in the wrong house or in the wrong location in the plumbing system, flow-based systems may require some of the flow allowance settings to be very high or disabled for long periods of time by ancillary switches to avoid nuisance alarms from normal flow
- 💧 Valves have been installed unprotected outdoors or in underground pits that flood during rain and destroy the electronics while voiding the warranty within weeks to months

- 💧 A valve system may be physically installed on the water main but not actually powered on or may have an error message that indicates it will not operate until the error is cleared

Knowing what to look out for and recognizing inadequacies in protection can improve the effectiveness of any installed system and prevent carriers from spending substantial policy credits on unqualified installations. Catching these issues before it is too late can also help keep policyholders from having a false sense of security or from finding out that the warranty will not cover replacement of their damaged system due to improper installation.

To realize the full potential of this technology and gain the most benefit from reduced water damage claims, the right system for each home and user needs to be installed in the right way. If the end-users are comfortable with their chosen systems and they work as designed, their value will be harder to deny. To achieve this, homeowners and installers need options, guidance, and access to technical support. Providing these services offers the greatest level of protection for the client, education for the installer and value for the carriers and brokers.

To explore how water security consulting, certification and partner discounts on systems can benefit you or your organization, contact Water Security Solutions, LLC at info@wssus.com for more information. Further resources can be found at <http://www.WSSUS.com>



Water Security Solutions, LLC may have trademarks, copyrights, or other intellectual property rights governing the subject matter and graphics in this document. Copying, sampling, reproducing or republication of this content is allowed only with proper attribution to Water Security Solutions, LLC.