

## About the Newstips editorial project proof-of-concept house

### **Challenging goal: an energy-miserly, 40-years-maintenance-free ultra-automated house**

#### **Premise:**

We are pulling together a 40-year-maintenance-free house that's also energy-miserly and embodies true automation, recognizing and responding to the needs of both the occupants and the structure, often without requiring any human participation (so, cutting chores rather than adding new ones).

Many companies in the building trades and in technology are already supporting us by providing products to this project. Nationwide weekly media coverage began in January, 2016, while still in the planning stages and is now reaching more than 6 million per week; that is still growing.

Further, we are now in a position to forecast what we believe will be the ROI for such contributions; in determining that, note that we treat media coverage as a waypoint, not an endpoint. Please don't classify us with the people who may try to justify their projects to you based on their visibility and then return scant impact. We believe that once we finish and have our debut media event, coverage of that will, over the course of the following weeks, reach more than 300 million (not all first exposures).

And yes, we may be interested in incorporating your products into this project – but no, we're not asking you to pay us any money. (*Money isn't necessarily off the table, at your option; we can take sponsorships for covering our out-of-pocket costs or can even discuss naming rights; more on that in a moment*). These few pages can explain why you may want to participate.

If you have an interest in participating in the coverage but do not have a product to provide, we can discuss a sponsorship payment to underwrite out-of-pocket costs (like trades-worker fees, concrete pours and so on); those payments would be made to a fund the builder has established and not to us. Sponsorships for as little as \$250 (associated with specific items) may be possible; total naming rights will cost \$350,000.

#### **The project site:**

We secured a 5-acre hilltop property in Aiken County, South Carolina and, after three years, finalized the floor plans. We describe it all on a Web site with a *Book of the House* at <http://40yearhouse.com>

#### **No invisibility**

Our promise: No contributions to the house, no matter how hidden they may be to the casual observer, will be invisible to the press coverage or the educational classroom resources that accompany this project.

Additionally, we will offer a graphical medallion to products selected for the 40-year house; participants will be allowed to use that in labeling and promoting those products. Note that there is no implied requirement to alter your warranty periods.

#### **Design precept: an ultra-automated house**

This is generation-after-next automation applied to a residence. Thousands of sensors, hundreds of actuators and more than half a hundred computers and controllers work together. The products you find on today's retail shelves cannot accomplish everything we accomplish.

We also take pains to hide or masquerade this technology, or integrate it into things that are not unexpected in a residence. Some of this involves new tech you might regard as inventions; we are working with vendors to get those manufactured. The Web site tells more.

#### **Design precept: reduced energy consumption**

No, we aren't going off the grid, but we do intend to slow the meters. We're finding ways to very strongly defend against energy losses, meaning reducing utility costs enough to make a cheapskate smile. The Plans section of the Web site discusses many of the tricks up our sleeves.

Effective insulation is a major concern and we are focusing on shell (wall, ceiling, roof, door, window, etc.) materials that accomplish surprisingly high (as the general population would regard them) levels of insulation on their own, before other insulation is added. Energy efficiency is a major concern. Local utility pricing favors natural gas over electricity so we intend to use gas more, but not exclusively.

We are also interested in adjuncts that may make sense for energy husbandry as long as there is no compromise in the project's longevity goal and no detriment to the "curb appeal" of the residence (important here in the context of press coverage, not any resale value). We'll need a lot of convincing, for example, before we look at awnings.

#### **Design precept: reduced maintenance**

How often do you change light bulbs? LED lighting fixtures today offer a 50,000-100,000-hour rated life expectancy, meaning more than 40 years in typical usage; once initially installed, they just work. (that little factlet is what initially inspired this project).

The shell of the house needs to insulate but we also want it to look good for decades, to need little to no maintenance in that time, and to endure. Consider similar requirements for infrastructure items: well pumps, plumbing, AC and Low-Voltage wiring, HVAC systems and their ducting, hot water, irrigation systems, lightning protection, fire countermeasures, breaker boxes and their adjuncts (whole-house surge protection, transfer switches for generators, usage monitoring interfaces) and so on.

#### **Design precept: smart extensions**

Without suggesting here how these tricks can be done, we can suggest some of the little stunts that can make life easier for a homeowner and reduce daily distractions.

Each resident's car that enters the driveway is recognized; a lamp post flashes if there's mail waiting in the mailbox; the door to that car's garage space lights up; when the car nears that door opens, lights inside the garage turn on, the connecting door to the house unlocks, people associated with cars that are not in their spaces get an e-mail saying you made it home OK; after you turn the car off and leave the garage, the garage door closes, the lights turn off and the door to the house locks up again.

The house tells you when a package or mail gets picked up or delivered. Rather than a single doorbell, a library of scores of doorbell tones get selectively played in appropriate rooms, at appropriate times, to signal that as well as arrival or departure events (at the garage and the driveway), waiting cars at the front door, people at the front door and more.

If there's a fire, every fan in the house turns off, the HVAC turns off, the gas line turns off at the tap past the generator feed, the house makes voice phone calls to both the local volunteer fire department and 911, all exterior doors unlock, the surveillance cameras monitoring those doors go into full-time record and a vanity panel at the front door (which normally only shows the house number) changes to show a floor plan of the house with the location of every adult, child, infant or pet and every hot spot in the house.

Heating and cooling run less often with longer on times and longer off times while still improving comfort in each and every room, both reducing energy costs and prolonging system life expectancy. The system recognizes rooms that are vacant and relaxes their settings.

We would love to hear of other clever items. For example, we already have a small pet door that only opens when it senses our pets' chips, and then only during the hours we allow.

**Note:** *We're a bit picky about "home automation" products. We insist that they work without Cloud connections; security and privacy demand that all connections stay inside our hardware firewall. Also, we address the spousal approval factor by forbidding the "wall measles" of little white lumps stuck everywhere. And we replace batteries with direct DC feeds.*

### Simplifying the task: grown-ups

Our proof-of-concept project house is designed as a residence for adults only. It has a master bedroom plus a Jack & Jill pair of guest bedrooms. The kitchen and pantry are ample but don't need to support the ongoing inventory and preparation demands of a large family. There is no anticipated play or game room.

There is no "man cave" *per se* but the bonus room above the 3-car garage serves many roles: a new office for Newstips (which also involves test benches and workbenches and a small soundproof recording booth), an exercise room, storage and a small (spouse's) office.

### No mortgage, so timing depends on phases

The house is being built in project segments, meaning some flexibility in timing when any next phase begins. This approach makes it ineligible for a mortgage, which also means that it is being funded out of pocket by Newstips, which may from time to time influence the overall completion time.

In balance, many third parties are already offering significant contributions to the project, reducing its overall cost and, as a result, keeping the overall timetable reasonable. Also, of course, having no mortgage is another element of being 40-years-maintenance-free.

The less-than-strict timetable is one reason that Newstips is providing early-on coverage of the many elements going into the project. We are also, in some cases, making arrangements for similar initial coverage by fellow journalists. The biggest coverage events will occur, of course, on completion.

### The Book of the House

We thoroughly document our principles and plans for this build on <http://40YearHouse.com>, which we intend as a go-to resource for media assets for press people, for curriculum resources for educators and for general information for curious members of the general public. We anticipate the site being close to 900 pages when done, including the ability to drill down to product-specific information and documentation.

We plan to include multiple time-lapse views of the construction, thermal images of the house, audio and video assets, high-resolution photography, product descriptions and links, in-process media coverage by us and others, narratives about choices, details about products and techniques and more.

**Bottom line: help us build this and gain high visibility**

Newstips is exposing the elements of this project to thousands of journalists and to millions of readers of and viewers/listeners to the media that are doing their own coverage of the project. We are making arrangements for enormously widespread coverage at and after the project's debut media event, enough to reach most of the American population. Companies providing products or other underwriting are welcome to attend that media event and to invite their own press "familiar". If this project makes sense as a showcase for your products – and if your products make sense for this project – let's talk.



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