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## Using Web Cameras to Deter Theft, Improve Efficiency and Reduce the Cost of Construction

### Can a web camera provide a return on investment to homebuilders?

Residential homebuilders face increased competition and pressure on margins as the once red-hot new home market slows. Adding to this pressure is an increase in theft and vandalism on jobsites. Web cameras do reduce theft and help builders become more efficient, reducing their costs while helping them differentiate their product to the consumer.



### Cost Reduction

Cameras help reduce costs by reducing theft in the following ways:

#### Reduce theft

According to the National Association of Home Builders, theft and the damage caused during the course of those crimes, is estimated at \$1 billion to \$2 billion annually in residential construction alone. That represents between 1 percent and 2 percent of the value of every home built. This is an enormous drag on profitability. Cutting theft by just half could increase profits by \$2500 on a \$250,000 home. For a typical contractor building 20 homes per year this would increase his income by \$50,000.

HomeView customers report a greater than 50% reduction in theft once cameras are installed. For many sites theft has been eliminated completely. Cameras, and the Surveillance signs posted around the jobsite, provide a powerful deterrent for would-be thieves, particularly those known to the general contractor—subcontractors for instance. Once criminals know they are under surveillance, most will move on to the next jobsite—one without a camera.

#### Increased Efficiency

While theft provides the largest potential savings, cameras can provide significant cost savings by increasing a builder's efficiency. Without a camera, a builder must rely on the word of suppliers and subcontractors or he must physically visit a jobsite

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to get a full picture of what is happening. If a general contractor could spend 100% of his time on-site, he would be able to coordinate subs and keep them moving at peak speed. For a builder with multiple jobsites and who is managing bids, suppliers, subs etc., being onsite 24/7 is not an option.

A web camera is a 24/7 view of the jobsite. From his desk or PDA/phone a builder can:

- See when materials are delivered
- See which subs are working—or not working
- View weather and ground conditions on site
- Provide detailed directions to subs and others over the phone

Subcontractors become more efficient when they can keep their workers under constant supervision, making sure they are on-site and actually working. Given the choice of which home to begin next, or work on today, the sub is more likely to send his crew to the jobsite that he can visually confirm is ready. This keeps the job moving faster.

HomeView customers estimate that by utilizing cameras to coordinate subs, deliveries and their own workers, they reduce the time to completion and increase their own efficiency by up to 10%. Even a 5% increase in efficiency would enable the 20-home-per-year builder to complete one more home, or to reduce their own overhead by 5%. Improving efficiency by five percent would reduce the cost to build a \$250,000 home by about \$750 (assuming overhead expense of \$15,000) and would reduce the build time by about two weeks.

#### **Reduce Lending Costs**

Typical lending costs will represent 5%, or \$1,250, for a typical \$250,000 home. This includes closing costs, bank inspection fees and interest. Using a web camera can reduce the lending costs by reducing the time to completion and by reducing the bank inspection fees.

HomeView is currently working with several lenders who will reduce or completely waive the bank inspection fees when a camera is installed. They are provided access to the camera view and reduce the number of on-site inspections. A typical rebate or fee reduction is \$250. One lender has even agreed to cover the entire cost of the camera.

Reducing the time to complete a home by two weeks as described above will reduce the interest expense (or cost of capital) by up to \$1,250 for a \$250,000 home.

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**Table: Total Cost Savings for \$250,000 Home**

Savings Category	Estimated Savings
Theft Deterrence	\$2,500
Increased Efficiency	\$1,250
Reduced Lending Costs	\$1,500
<b>Total</b>	<b>\$5,250</b>

### **Increase Demand and Customer Satisfaction**

For the custom home builder, the benefits of the camera extend beyond cost savings. A builder's reputation is everything and word-of-mouth is critical in attracting new customers. It seems that every new home buyer has a horror story during the construction process. Having a camera on-site and providing access to the homebuilder will help in two ways:

- 1)It can help instill confidence in the prospective customer by showing that you have nothing to hide
- 2)It can reduce homeowner frustration (improve their satisfaction) by allowing the homeowner to see what is happening without having to drive to the jobsite just to find nothing has changed.

Most importantly, a camera will give the homeowner something to tell (and show) their friends when talking about their builder and building experience. A short time-lapse video of the home being built can be created and delivered to the homeowner for them to send to friends and family. In this way a camera becomes a great marketing tool for the builder.