



CASE STUDY

RFID boosts gated community by \$50 million

Homeowner creates custom gatehouse system based on Metalcraft RFID labels

Opportunity: Guarded gatehouse can increase home values

Haven View Estates is a private, gated community of 246 custom half acre+ homes at the base of the San Gabriel Mountains in the upscale city of Alta Loma, California.

For 15 years, access was controlled by garage door opener style “clickers” and an entry directory that allowed residents to admit visitors via phone or a keypad with a 4-digit code. Over time, the clickers were cloned by countless non-residents and the entry code was routinely used by uninvited guests.

In 2008, the community began construction of a staffed gatehouse to improve traffic, privacy and security. While not the primary motivation, initial research indicated that this would also result in a 19 percent increase in home values compared to those behind gates alone, equating to an increase in total community property values of almost \$50 million!

Once construction on the community’s main entry began, traffic was diverted to a secondary entry, and a temporary guard service was hired to manage visitors. This experience immediately pointed to a number of glaring inefficiencies. So, Dick Card, a resident in the community who had a significant background in electronics and software, but none in entry automation, took on the task of investigating the various entry automation options as a replacement for the existing antiquated clicker controls and keypad access code. According to his research, “The apparent logical choices were bar code, license plate recognition and RFID entry controls. However, the list was quickly narrowed by considering the real world. First of all, bar code stickers are big, ugly and very offer limited mounting possibilities. While license plate recognition (LPR) works under ideal circumstances, many residents and visitors do not have front license plates. So, this required a rear-of-vehicle visible camera that was sufficiently back to accommodate Escalade ESVs, etc. However, to comply with fire department access regulations and the gatehouse setback, we simply didn’t have a LPR mounting location that would work. Then, there was seasonal fog and heavy rain to consider. If the LPR camera could not see the plate, entry would be blocked. So, RFID quickly became the technology of choice”.

Mr. Card’s next task was to find an RFID tag and reader combination that would provide reliable vehicle recognition and would appear seamless to authorized residents without allowing the second vehicle in line to admit a potentially unauthorized first in line.

This meant the use of passive tags. Furthermore, according to Mr. Card, “We knew that most of our residents drove luxury cars and were not going to stand for a sticker in the middle of their Ferrari or Lamborghini windshield. As a result, stealth was a big consideration. This immediately eliminated a number of reader manufactures who had proprietary tags. Some were the size of a ¼” thick business card and only came in white, not to mention that they were \$15.00 each. So, we first looked for a tag that was stealthy, easy to install and was not associated with a proprietary reader – no small task. However, when we found Metal Craft, we knew had a winner. A user in central California had had excellent results with Metal Craft windshield stickers and AWID RFID readers. So, we contacted both companies for more information and they both had solutions that perfectly fit the bill; The Metal Craft tags were about the size and thickness of a typical Band Aid and we made of a flexible all-weather material that allowed outside mounting on surfaces of almost any contour. The AWID readers offered state-of-the art passive technology and the ability to separately purchase Metal Craft tags. This combination offered a complete package at significantly lower cost than any alternative we could find. And, as it turned out, the combination gave us consistent reads in the 7’ to 15’ sweet spot that we were looking for”.

“Meanwhile, for the residents of Haven View Estates, the placement of each tag was key to our success. For example, of the nearly 1,500 vehicles on which we installed Metal Craft RFID tags, only about 20% were installed on the windshield. Almost 50% were installed hidden under the left hand mirror and many were installed in vehicle air dams and other stealthy locations. We even created a portable version by encapsulating the stickers in heat sealed luggage tags. This all could have only been accomplished with a small, very thin, flexible and highly weather resistant tag and a reader that reliably maintained the range necessary to make our residents give up their clickers and never look back”.

“This project consisted of six different bleeding edge technologies that included Gatesure gatehouse management software, Arecont 5 megapixel h.264 cameras, NUUIO h.264 camera management software, Metal Craft RFID tags, AWID’s newly released reader and a custom access control card of our own design. Yet, because each of the pieces worked as advertised, the whole system has been a technological gem. Imagine, access controls where almost 1,500 users are 100% satisfied and, after 6 months of operation, there has not been one single complaint”.

“Not only that, by charging residents for four our more tags, by creating a separate tag class that allows us to charge gardeners, pool cleaners, housekeepers and other service providers an annual tag use fee, and by negotiating a lower guard service rate due to the automation, we were cash-positive right out of the gate,” said Card.

Call 800-437-5283 or visit www.idplate.com for more information on Metalcraft RFID products and service.