# AVAware Catalog Technology
## A Technical Overview

## Overview

Creating software for the Architectural Openings industry inevitably becomes extremely problematic when tackling the enormous amount of hardware information and the lack of standardization of this information within hardware catalogs. **AVAware** has developed an advanced catalog technology that builds the most complex hardware configurations with ease.

Architectural hardware catalogs are unquestionably designed to be interpreted by a human being who is able to navigate through the many options, conditions and exceptions. The traditional electronic database approach to indexing a hardware catalog is insufficient considering the number of records required to capture all possible configurations of each product. Just one product with only a handful of options can literally yield millions of permutations. This mass of information occupies an enormous amount of memory, is difficult to work with and nearly impossible to update or maintain.

**AVAware** Catalog Technology is different. After receiving price books from manufacturers, our team of Catalog experts analyze and deconstruct product information into base products and their most granular components and options. Using our advanced in-house catalog file building software, this information is then optimized and processed to create the catalog files that power **AVAware** products.
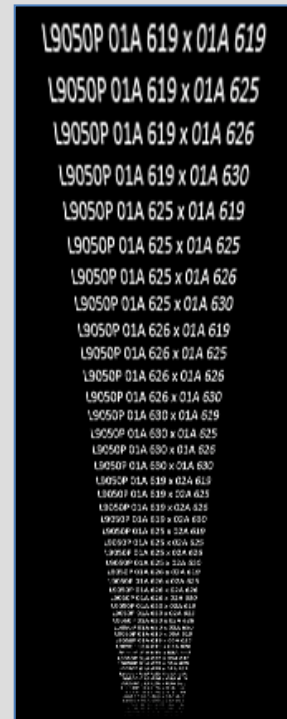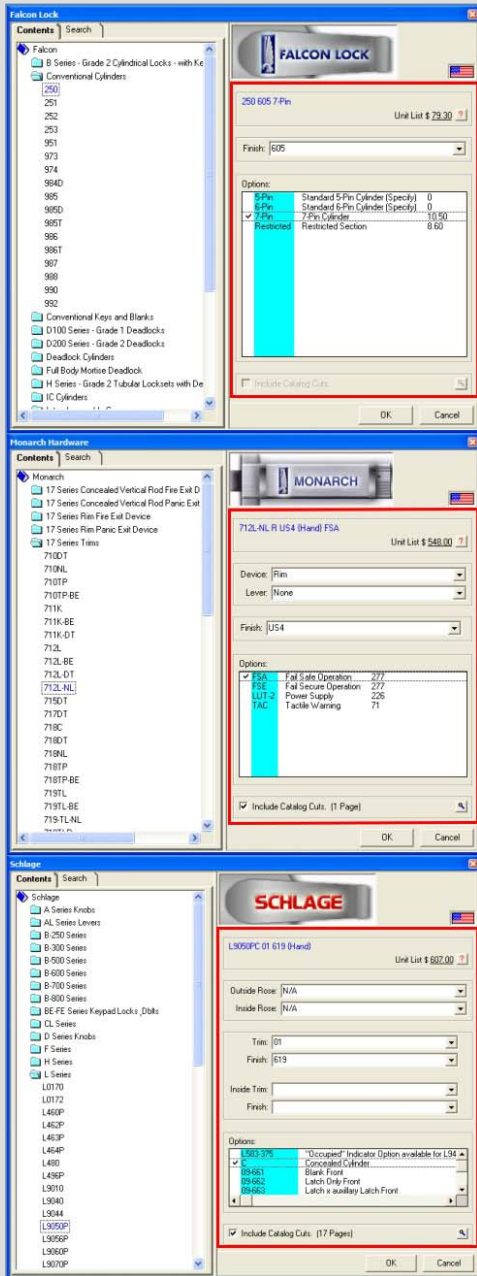


A Schlage L Series 9050P, even
With only Trims and Finishes
taken into consideration, yields
millions of permutations

| Product | Outside Rose | Inside Rose | Trim | Finish | Inside Trim | Inside Finish | Possible Configurations |
|---|---|---|---|---|---|---|---|
| Schlage L9050P | 4 | 4 | 55 | 9 | 55 | 9 | 3,920,400 |

## Product Builder



The *Product Builder* customizes itself to suit the selected product, providing all available options

**AVAware** catalog files contain much more than just product information; they are a combination of data and software. Catalog files are interpreted by our *Product Builder* – a dynamic tool that uses software inside the catalog file to adapt itself to a given product. Once a base product is loaded into the *Product Builder* from a catalog file, an option window is created with the controls and selectors required to accommodate every possible configuration for the selected base product. When a different base product is loaded, the *Product Builder* is re-created and customized with the selectors for the available options of the new base product. The *Product Builder*, using the catalog file as an engine, is able to generate product codes, ordering information, descriptions, prices and more, all with respect to manufacturer nomenclature, conditions and current pricing schedules.

The powerful synergy of optimized data and intelligent software makes **AVAware** Catalog Technology superior.

Catalog files take up very little memory. In fact, an average catalog file containing an entire price book is less than one megabyte in file size. By taking up such little memory, they can be easily transferred onto disks, USB drives, across networks - even emailed. The *Product Builder* is able to load products from catalog files very quickly, allowing millions of product configurations to be available to industry professionals instantly. All product information and pricing is maintained by our catalog team, and remains in complete compliance with current printed manufacturer price books.

## SKU Numbers

Product SKU numbers are unique numeric codes assigned to a specific product build. SKU numbers are important for manufacturers and distributors utilizing a "Quick Ship" or "Stock Product" system, because it allows them to identify, describe and categorize a certain product. Typically these products are major sellers and are pre-built so the options and details of the item don't have to be specified.

Examples of SKU numbers include:

| Product | Design | Finish | Latch | Strike | SKU |
|---------|--------|--------|--------|--------|-----|
| A10S | LEV | 605 | 11-068 | 10-001 | 043156959808 |
| A10S | LEV | 613 | 11-068 | 10-001 | 043156918690 |

Conventional methods of keeping track of SKU numbers are very difficult to maintain, as each SKU can only be assigned to one permutation of product. With so many SKU numbers, one could accidentally assign two SKU numbers to one configuration, or forget that a particular configuration is associated with a SKU. **AVAware** Catalog Technology solves these problems. After a hardware item is built in the *Product Builder*, a SKU number can be assigned to it. By simply typing in a SKU number, the software identifies the base product, configures all of the saved options and settings and populates all fields. The product can also be deconstructed and reconfigured if any changes are required.

| | Short Code | Catalog | Product Code | SKU | Handing | Finish (BHMA) | Finish (ANSI) | Category | Sub-Category | Unit List |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | Schlage | A10S LEV 626 11-068 (10-001 1 1/8") | 043156912025 | N/A | 626 | | Securing Device | Latchset | 141.00 |
| 2 | | Schlage | | 043156959808 | | | | | | |

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A saved SKU number can be used to recall the exact product (with all selected options) to which it is assigned

## Reverse SKU Lookup

In addition to the ability of the *Product Builder* to recall exact product configurations by SKU numbers, the *Product Builder* can also recall SKU numbers from exact product configurations. If a product is built using selections and options that match a product with a SKU number assigned, the *Product Builder* will recall the SKU. This functionality not only prevents multiple SKU numbers being assigned to one product configuration, it also prevents products from being built and ordered as custom hardware if they have already been categorized as a stock item.



If a product built in the *Product Builder* matches the exact configuration of a saved SKU, the software will recognize the SKU number

## Additional Features
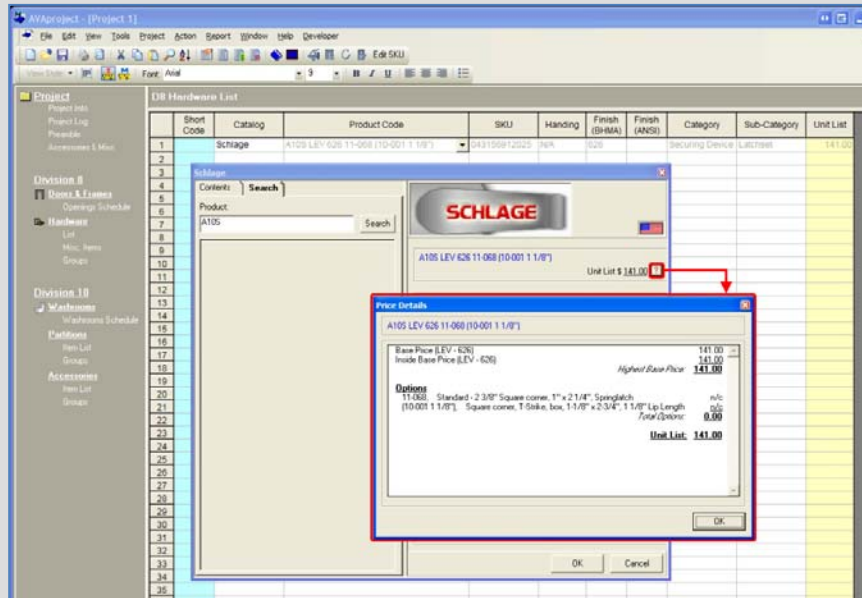


The logic used to determine pricing can be viewed by clicking the question mark beside the listed price
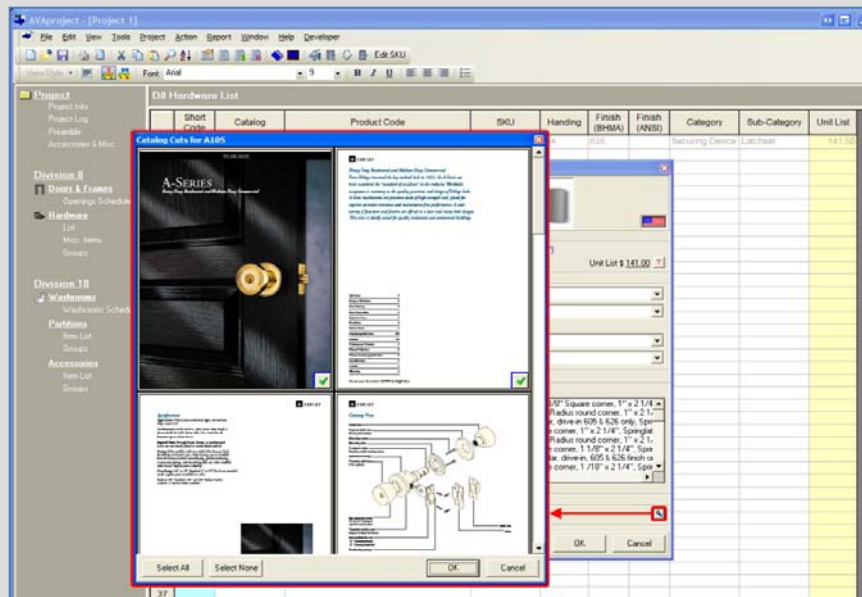


Catalog cut pages for the selected product can be viewed and included

## The AVAware API

The **AVAware** API allows software developers to unleash the power of **AVAware** Catalog Technology in their own software and applications. Once a catalog file is loaded into the API, a fully functional *Product Builder* is created. The *Product Builder* returns formatted data containing all of the applicable product information including product series, product code / nomenclature, description, manufacturer, DHI category / sub-category, handing information, keying information, sizing, finish code (both ANSI and BHMA), door preparation(s), frame preparation(s) and unit price. The *Product Builder* also returns a special selections object, which can be loaded back into the *Product Builder*, re-selecting all options for easy modification.

For more information, general inquiries or to arrange an online product demonstration, please contact us directly.

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