

Streamline Variants Builder - Documentation

v1.1.0

Streamline Variants Builder

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License

Streamline Variants Builder

Version: 1.1.0

Author: Streamline Diving

Requires: WordPress 5.8+, WooCommerce 5.0+, PHP 7.4+

License: Proprietary

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Overview

Streamline Variants Builder is a powerful WooCommerce plugin designed to streamline the creation and management of variable products with multiple variations. Built specifically for businesses that need to manage large product catalogs with complex variation structures.

Key Benefits

- ✓ **Save Time** - Create 100+ variations in minutes instead of hours
 - ✓ **Bulk Import** - Import thousands of products from CSV
 - ✓ **Custom Galleries** - Unique image galleries for each variation
 - ✓ **Error Prevention** - Built-in validation and duplicate detection
 - ✓ **Professional Results** - Clean, consistent product data
-

☆☆ Features

Product Creation & Management

- ✓ **Create/Edit Variable Products** - Intuitive interface for managing complex products
- ✓ **Combine Products** - Bulk select and combine multiple simple products into variable products
- ✓ **Load Existing Products** - Load and edit any existing variation product
- ✓ **Auto-Detection** - Automatically detects attributes from existing variations
- ✓ **Bulk Operations** - Select/deselect all fields with one click
- ✓ **Live Preview** - See changes before saving

Attribute Management

- ✓ **Global Attributes** - Use existing WooCommerce attributes
- ✓ **Custom Attributes** - Create product-specific attributes
- ✓ **Auto-Population** - Values auto-fill from parent product
- ✓ **Validation** - Prevents invalid attribute configurations

Image Management

- ✓ **Multiple Images Per Variation** - Each variation can have multiple images
- ✓ **Custom Gallery System** - Compatible with Blocksy theme galleries
- ✓ **Drag & Drop Upload** - Easy image organization
- ✓ **Drag to Reorder** - Click and drag images to reorder both parent and variation galleries
- ✓ **Image Modes** - Replace or append images

Advanced CSV Import

- ✓ **Bulk Import** - Import thousands of variations from CSV
- ✓ **Batch Processing** - Handles large files without timeout
- ✓ **Progress Tracking** - Real-time import progress
- ✓ **Error Reporting** - Detailed logs of failed imports
- ✓ **Preserve Mode** - Keep existing data when updating

Product Review & Organization

- ✓ **Reviewed Status** - Mark products as reviewed after verification

- ✓ **Filter by Status** - Show all, reviewed only, or unreviewed only
- ✓ **Visual Indicators** - Green highlighting for reviewed products
- ✓ **Persistent Tracking** - Reviewed status saved permanently

Data Integrity

- ✓ **SKU Validation** - Prevents duplicate SKUs
- ✓ **Attribute Matching** - Ensures parent/variation consistency
- ✓ **Term Conversion** - Automatic term ID/name/slug conversion
- ✓ **Database Sync** - Keeps WooCommerce data synchronized

Installation

Method 1: Manual Upload

1. Download the plugin ZIP file
2. Go to **WordPress Admin** → **Plugins** → **Add New** → **Upload Plugin**
3. Choose the ZIP file and click **Install Now**
4. Click **Activate**

Method 2: FTP Upload

1. Extract the ZIP file
2. Upload the `streamline-variants-builder` folder to `/wp-content/plugins/`
3. Go to **WordPress Admin** → **Plugins**
4. Find **Streamline Variants Builder** and click **Activate**

Requirements Check

After activation, the plugin will check for: - ✓ WooCommerce installed and active - ✓ PHP 7.4 or higher - ✓ WordPress 5.8 or higher

If requirements aren't met, you'll see an admin notice.

Quick Start Guide

Creating Your First Variable Product

1. Navigate to Plugin

- Go to **WordPress Admin** → **Variants Builder** → **Create/Edit Variant**

2. Enter Product Information

- Product Name
- Description
- SKU
- Categories
- Price

3. Add Attributes

- Click **Add Attribute**
- Choose “Use Existing Attribute” or “Create Custom Attribute”
- Select values (e.g., Size: Small, Medium, Large)

4. Add Variations

- Click **Add Variation**
- Select attribute values for each variation
- Set variation-specific data (SKU, price, images)

5. Save Product

- Click **Save Variant Product**
- Product will be created in WooCommerce

Loading an Existing Product

1. Go to **Variants Builder** → **Create/Edit Variant**
2. Enter **Product ID** or **SKU** in the search box
3. Click **Search**
4. Select the product from results
5. Product data will load automatically
6. Make changes and click **Save**

1. Product Form

Basic Information

- **Product Name** - Main product title
- **Override Title** - Use a different title than variations
- **Description** - Product description (HTML supported)
- **SKU Generation Method** - Choose how parent SKU is created:
 - **Custom SKU** - Enter your own SKU manually
 - **Auto Generate** - Creates unique SKU (VAR-timestamp-random)
 - **SKU+XXXX** - Appends "-XXXX" to base SKU (e.g., ABC123 → ABC123-XXXX)
 - **SKU-VAR** - Appends "-VAR" to base SKU (e.g., ABC123 → ABC123-VAR)
 - Note: Base SKU field stays visible for reference when using auto-generation
- **Categories** - WooCommerce categories with hierarchical display
 - Main categories shown in **bold**
 - Sub-categories indented for easy identification
- **Brand** - Product brand (if supported by your theme)

Additional Information

- **Cost of Goods** - For profit tracking
- **GTIN/UPC/EAN** - Product identifiers

Stock Management

- **Enable Stock Management** - Track inventory
- **Stock Quantity** - Available units
- **Allow Backorders** - Continue selling when out of stock

Pricing

- **Regular Price** - Base product price
- **Use Parent Price** - Apply same price to all variations

Product Images

- **Upload Multiple Images** - Main product images
- **Drag to Reorder** - Change image order
- **Set Featured Image** - First image is featured by default

2. Attributes & Options

Adding Attributes

Use Existing Attribute: 1. Select from dropdown (e.g., “Color”, “Size”) 2. Choose values or add new ones
3. Values are shared across your store

Create Custom Attribute: 1. Enter custom name (e.g., “Material Type”) 2. Add values specific to this product 3. Not available to other products

Attribute Options

- **Visible on product page** - Show on frontend
- **Used for variations** - Required for variable products

Important: Refresh Variations

⚠ **After changing attributes, you MUST click “Refresh Variations”** before saving or editing variations below.

This syncs the attribute changes with all variations.

3. Variant Products (Variations)

Adding Variations

Method 1: Manual Entry 1. Click **Add Variation** 2. Fill in variation details 3. Set attributes (e.g., Size = Large, Color = Blue)

Method 2: Load Existing 1. Click **Add Variation** 2. Search for existing product by Name, SKU, or ID 3. Product data auto-fills

Variation Fields

Each variation can have: - **Attributes** - Combination of attribute values (e.g., Large/Blue) - **Description** - Variation-specific description - **SKU** - Unique identifier - **Cost of Goods** - Per-variation cost - **Pricing** - Regular and sale price - **Stock** - Individual stock management - **Images** - Multiple images per variation

Bulk Controls

Use Parent Values - Copy parent product values to this variation

4. Images & Galleries

Single Image Mode

- Upload one image per variation
- Replaces variation image when selected on frontend

Custom Gallery Mode

- Upload multiple images per variation
- Creates custom gallery that displays on frontend
- **Compatible with Blocksy theme galleries**
- Each variation can have unique gallery

Image Management

- **Replace Mode** - New images replace existing
- **Append Mode** - New images add to existing
- **Delete Images** - Remove images from parent or variations

5. Load Existing Variants

The **Load Existing Variant** tab provides a visual interface to browse, search, and manage all your variable products.

Features

Product Cards - Visual cards showing product name, SKU, ID, and variation count - Product thumbnail (or placeholder if no image) - Quick action buttons for editing and viewing

Search & Filter - **Search Box** - Find products by name, SKU, or product ID - **Filter Dropdown** - Show all products, reviewed only, or unreviewed only - **Sort Options** - Sort by ID (newest/oldest), name (A-Z/Z-A), or SKU (A-Z/Z-A)

Reviewed Status Tracking - **Mark as Reviewed** - Check the “Reviewed” checkbox on any product card - **Visual Indicators** - Reviewed products display with green border and background - **Persistent Status** - Reviewed status saves permanently in the database - **Filter Progress** - Use “Unreviewed Only” filter to see what’s left to review

Quick Actions - **Click Card** - Opens product in this plugin for editing (new window) - **Edit WooCommerce** - Opens product in WooCommerce editor (new window) - **View Frontend** - Opens product on your website (new window)

Typical Workflow for Large Catalogs

When managing 800+ products: 1. Load the “Load Existing Variant” tab 2. Filter to “Unreviewed Only” 3. Review each product for accuracy 4. Check the “Reviewed” box after verification 5. Move to next unreviewed product 6. Track your progress with the filter

6. Combine Products into Variable Products

The **Combine Products** tab allows you to select multiple simple products and combine them into a single variable product with all products becoming variations.

Features

Product Selection - Category Filter - Filter products by category (hierarchical display) - **Search** - Search by product name, SKU, or ID - **Clear Category** - Reset category filter to show all products - **Visual Cards** - Product cards with name, SKU, ID, type, and thumbnail - **Multi-Select** - Click products to add to selection (green border when selected) - **Drag to Reorder** - Reorder selected products (first product = parent data source)

Parent Product Options

Before loading products into the form, choose how to handle the parent:

Option 1: Use First Product as Parent (Default) - First selected product becomes the variable parent - Keeps its Product ID and data - Other products become variations - Best for: Converting a main product + its variants

Option 2: Create New Parent Product - Creates a new parent product using first product's data - ALL selected products (including first) become variations - Parent gets auto-generated SKU - Best for: Creating brand new variable product from similar products

Workflow

1. **Filter or Search** - Find products you want to combine
2. **Select Products** - Click 2 or more products (they turn green)
3. **Reorder if Needed** - Drag selected products to reorder
4. **Choose Parent Mode** - Select "Use First as Parent" or "Create New Parent"
5. **Load Selected Products** - Click button to load into Create/Edit form
6. **Add Attributes** - Add attributes (e.g., Color, Size) in the Attributes section
7. **Refresh Variations** - Click to apply attributes to all variations
8. **Set Attribute Values** - Set the specific attribute value for each variation
9. **Review Data** - Check SKUs, prices, images, stock levels
10. **Save Variant Product** - Click to convert products into variable product

What Gets Loaded

From parent source product: - ✓ Product name - ✓ Description - ✓ SKU (for SKU generation base) - ✓ Price - ✓ GTIN/UPC/EAN/ISBN - ✓ Cost of Goods - ✓ Categories - ✓ Brand - ✓ Stock management settings - ✓ Product images (drag-to-reorder enabled)

From each product becoming a variation: - ✓ Original product ID (for conversion tracking) - ✓ Description - ✓ Cost of Goods - ✓ SKU - ✓ Regular price - ✓ Sale price - ✓ Stock management - ✓ Stock quantity - ✓ Backorder settings - ✓ Product images (drag-to-reorder enabled)

Important Notes

⚠ **No Auto-Conversion** - Products load into the form for review first. You must add attributes and click “Save Variant Product” to complete the combination.

⚠ **Attributes Required** - Variable products need at least one attribute to create variations. Add attributes manually after loading.

⚠ **Product Name in Headers** - Each variation header shows the original product name for easy identification.

⚠ **SKU Handling** - If using “Use First Product as Parent” and the parent SKU conflicts, it will be cleared (variations keep their SKUs).

Advanced Import

The Advanced Import feature allows you to import hundreds or thousands of variations from a CSV file.

CSV Format

Required Columns

COLUMN	DESCRIPTION	EXAMPLE
<code>group_key</code>	Unique identifier for product group	<code>PROD-001</code>
<code>product_name</code>	Main product name	<code>5mm Wetsuit</code>
<code>sku</code>	Product SKU	<code>WS-5MM-001</code>

Attribute Columns

Attribute columns follow the pattern: `attribute_{slug}`

Examples: - `attribute_pa_color` - For global “Color” attribute - `attribute_pa_size-boots` - For global “Size-boots” attribute - `attribute_material` - For custom “Material” attribute

Optional Columns

COLUMN	DESCRIPTION
<code>variation_description</code>	Variation-specific description

<code>regular_price</code>	Price
<code>sale_price</code>	Sale price
<code>stock_qty</code>	Stock quantity
<code>cost_of_goods</code>	Cost tracking
<code>category</code>	Product category
<code>tags</code>	Product tags
<code>image_1</code> through <code>image_10</code>	Image URLs or IDs

Example CSV

```
group_key,product_name,sku,attribute_pa_color,attribute_pa_size,regular_price,image_1,image_2
WS-001,5mm Wetsuit,WS-5MM-S-
BLK,Black,Small,199.99,https://example.com/img1.jpg,https://example.com/img2.jpg
WS-001,5mm Wetsuit,WS-5MM-M-
BLK,Black,Medium,199.99,https://example.com/img1.jpg,https://example.com/img2.jpg
WS-001,5mm Wetsuit,WS-5MM-L-
BLK,Black,Large,199.99,https://example.com/img1.jpg,https://example.com/img2.jpg
```

Import Process

Step 1: Upload CSV

1. Go to **Variants Builder** → **Advanced Import**
2. Click **Choose File** and select your CSV
3. Plugin parses and validates the file
4. Click **Next** to continue

Step 2: Preview & Validate

- View grouped products
- See how many variations each product will have
- Check for errors or warnings
- Click **Start Import** when ready

Step 3: Configure Import

Batch Size: - **1-3** - Safest for large imports (5000+ rows) - **5** - Recommended for most imports - **10-25** - Faster but may timeout on slow servers - **50+** - Only for small imports on fast servers

Options: - **Update Existing Products** - Update if product exists - **Preserve Existing Data** - Keep data not in CSV - **Enable Custom Gallery** - Create multi-image galleries

Step 4: Import Progress

- **Pass 1** - Create/update products
- **Pass 2** - Process custom galleries (if enabled)
- Real-time progress bar
- **Pause/Resume** - Stop and continue later
- **Error Tracking** - View failed imports

Step 5: Review Results

- **Successful Imports** - Download CSV report
- **Failed Imports** - Download CSV with error details
- View imported products in WooCommerce

Import Tips

For Large Files (1000+ rows)

1. **Use small batch sizes** (3-5)
2. **Don't close browser** during import
3. **Check server limits** first
4. **Test with sample** (50 rows) first

If Import Times Out

1. **Reduce batch size** to 1
2. **Contact your host** to increase:
 - PHP execution time (600 seconds)
 - Memory limit (768M)
3. **Disable security plugins** temporarily
4. **Try during off-peak hours**

If Import Fails

1. **Export failed products** CSV

2. **Fix errors** in CSV
3. **Re-import** only failed products
4. Check `/wp-content/debug.log` for errors

Troubleshooting

Common Issues

1. Variations Don't Show on Frontend

Problem: Dropdown is empty on product page

Solutions: 1. Go to product in WooCommerce 2. Click **Variations** tab 3. Click **Generate variations** from dropdown 4. Save product

Or use the Variation Sync Tool: 1. Upload `variation-sync-tool.php` to plugin folder 2. Visit:

`yourdomain.com/wp-content/plugins/streamline-variants-builder/variation-sync-tool.php?product_id=XXXX`

3. Tool will sync parent/variation attributes

2. Attribute Values Don't Save

Problem: Values disappear after reload

Cause: Mismatch between term IDs and names

Solution: 1. The latest plugin version fixes this automatically 2. If still occurring, use Variation Sync Tool (above)

3. SKUs Not Saving

Problem: Variations use parent SKU

Cause: Duplicate SKU or validation error

Solution: - Check debug log: `/wp-content/debug.log` - Look for: `SVB: ✘ SKU failed:` - Fix duplicate SKUs in your data - Plugin will auto-add suffix if SKU exists

4. Import Times Out (503 Error)

Problem: Import fails with 503 error

Solutions: 1. **Reduce batch size** to 3 or 1 2. **Upload timeout-protected version:** - Use `class-svb-advanced-import-ULTRA-SAFE.php` 3. **Contact hosting provider** to increase: - `max_execution_time` to 600 - `memory_limit` to 768M 4. **Disable caching plugins** during import

5. Images Don't Display

Problem: Variation images missing on frontend

Cause: Gallery mode not enabled

Solution: 1. Edit product in plugin 2. Make sure “Custom Gallery” is enabled 3. Re-save product 4. Clear cache

Debug Mode

Enable WordPress debug mode to see detailed errors:

```
// Add to wp-config.php
define('WP_DEBUG', true);
define('WP_DEBUG_LOG', true);
define('WP_DEBUG_DISPLAY', false);
```

Errors will be logged to: `/wp-content/debug.log`

Look for lines starting with: `SVB:`

? FAQ

General Questions

Q: Does this work with any theme?

A: Yes, but custom gallery features are optimized for Blocksy theme.

Q: Can I import products from other plugins?

A: Yes, as long as they're standard WooCommerce variable products.

Q: Does it work with HPOS (High-Performance Order Storage)?

A: Yes, fully compatible with WooCommerce HPOS.

Q: What's the maximum number of variations?

A: No hard limit, but WooCommerce recommends under 200 per product for performance.

Import Questions

Q: What's the maximum CSV size?

A: Depends on your server, but plugin handles 10,000+ rows with proper batch settings.

Q: Can I update existing products?

A: Yes, check “Update Existing Products” during import.

Q: What happens if import fails midway?

A: Products imported before failure are saved. Export failed products and re-import.

Q: Can I use image URLs in CSV?

A: Yes, use full URLs. Plugin downloads and attaches them.

Attribute Questions

Q: Difference between global and custom attributes?

A: Global attributes are reusable across products. Custom are product-specific.

Q: Can I convert custom to global attributes?

A: Not directly, but you can create global attribute and manually migrate.

Q: Why do I need to “Refresh Variations”?

A: This syncs attribute changes to variation dropdowns. Always click after editing attributes.

Support

Documentation

- **README.md** - This file
- **User Guide** - user-guide.html (detailed visual guide)
- **PDF Guide** - readme.pdf (printable version)

Getting Help

For Bugs or Issues: 1. Check **Troubleshooting** section above 2. Enable debug mode and check logs 3. Contact: support@streamlinediving.com

For Feature Requests: - Email: features@streamlinediving.com

For Custom Development: - Email: dev@streamlinediving.com

Useful Resources

- WooCommerce Documentation: <https://woocommerce.com/documentation/>
- WordPress Support: <https://wordpress.org/support/>
- PHP Manual: <https://www.php.net/manual/>

Changelog

Version 1.1.0 - February 2026

New Features

- ✨ **Combine Products** - Select and combine multiple simple products into variable products
 - Bulk product selection with search and category filtering
 - Two parent modes: use first product or create new parent
 - Drag-to-reorder selected products
 - Preserves all product data (images, SKUs, prices, descriptions)
- ✨ **Drag-to-Reorder Images** - Click and drag to reorder parent and variation images
 - Visual drag indicators (blue borders, shadows, placeholders)
 - Works for parent product images and all variation galleries
 - Auto-saves new image order
- ✨ **Enhanced SKU Generation** - Improved SKU generation methods
 - Custom SKU - manual entry
 - Auto Generate - unique timestamp-based SKUs
 - SKU+XXXX - appends literal "-XXXX" suffix
 - SKU-VAR - appends literal "-VAR" suffix
 - Base SKU field always visible for reference
- ✨ **Better Data Loading** - Improved product data population
 - GTIN/UPC/EAN/ISBN fields now populate correctly
 - Parent descriptions load properly
 - All images load with full gallery support

Improvements

- 🐛 Fixed SKU conflict handling when combining products
- 🐛 Improved variation-to-variable product conversion
- 🐛 Enhanced image sortable initialization for dynamic content
- 🐛 Better form field preservation when switching SKU methods

Bug Fixes

- 🐛 Fixed SKU disappearing when changing generation method
- 🐛 Fixed variation image drag placeholder not showing
- 🐛 Fixed parent SKU not loading from combined products

- 🚫 Fixed images not being draggable after upload

Version 1.0.0 - December 2025

Initial Release

- ✨ Create/edit variable products
- ✨ Bulk attribute management
- ✨ Advanced CSV import with batch processing
- ✨ Custom gallery system
- ✨ Auto-detection of existing variations
- ✨ SKU validation and duplicate prevention
- ✨ Comprehensive error logging
- ✨ WooCommerce HPOS compatibility
- ✨ Timeout protection for large imports

License

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Credits

Developed by: Streamline Diving Development Team

Website: <https://www.streamlinediving.com>

Support: support@streamlinediving.com

Special Thanks: - WooCommerce team for excellent documentation - WordPress community for continuous support - Beta testers for valuable feedback

Made with ♥ for WooCommerce store owners who need powerful variation management.