chx4-Web Theme Builder

Designing a Theme

Contents

Getting started 4
- Find your way around 4
- Notes on each page 6
- Your work is kept as you go 7
- Before you start 7

How a theme fits together 9
- Styling, in the order a site loads it 9
- Content, from block to page 10
- What a site sees when you release a new version 10
- So, where should a rule go? 10

My themes 12
- Start a theme 12
- Switch to another theme 12
- Rename a theme 12
- Copy a theme 12
- Delete a theme 13

Colours 14
- Choosing colours 14
- Start from a scheme 15
- Adjust a colour 16
- Keep it readable 19
- The stylesheet 23

Fonts 24
- Choosing fonts 24
- Start from a pairing 25
- Choose a font 26
- Use Adobe Fonts 28
- What the theme loads 28

Stylesheet 29
- Write the theme’s rules 29
- List your layout classes 30
- Add a scroll-in animation 30

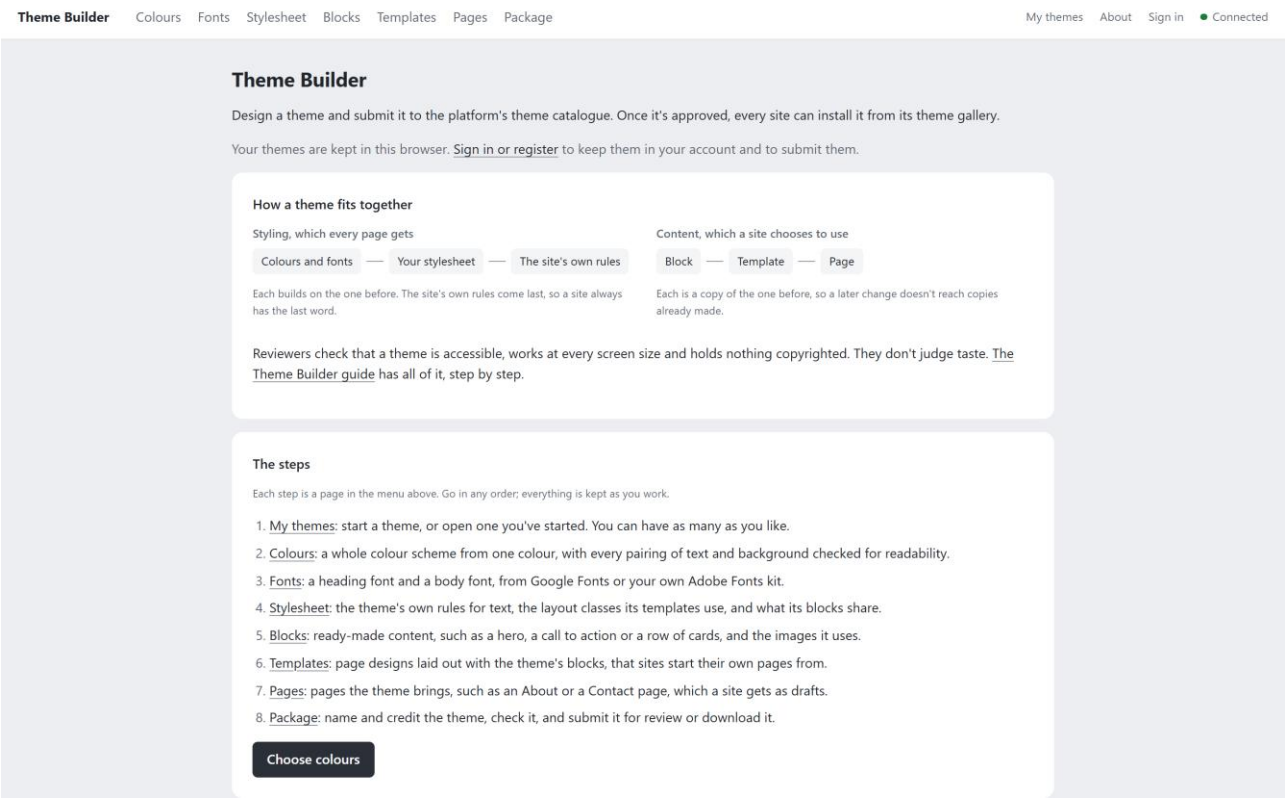
Blocks 32
- Add a block 33
- Give a block its own colours 33
- Use tokens and settings 34
- The site’s header and footer 35

Images 36
Templates 37
Add a template 37
Lay it out 38
Preview it 39
Choose what comes with it 39
Pages 41
Add a page 42
Its address and description 42
Preview it 42
Package 44
Name and credit the theme 45
Check it 46
What reviewers look for 46
Submit it for review 47
Download it 47
Use it on your own site 47
Your account 48
Register 48
Keep your recovery key 48
Sign in 49
Signed in 50
Sign out 50
Change your password 50
Forgotten your password 51

Getting started

Theme Builder is where you design a theme for chx4-Web: the colours, fonts, styling, blocks and page templates that change how a whole website looks. When your theme is ready you submit it for review. Once a reviewer approves it, every site on chx4-Web can install it from its theme gallery.

Theme Builder is at **https://web.chx4.com/builder/**. It runs in your web browser; there's nothing to install.



The Theme Builder home page

Find your way around

The menu across the top has a page for each part of a theme. You can visit them in any order and come back to any of them. Click **Theme Builder**, at its left, to come back to the home page, which shows how a theme comes together.

Page	What you do there
Colours	Choose the theme's colour scheme.
Fonts	Choose a font for headings and one for body text.
Stylesheet	Write the theme's own CSS: text, layout classes, and what your blocks share.
Blocks	Make the ready-made pieces of content the theme brings, and upload their images.
Templates	Lay out page designs with the theme's blocks.
Pages	Lay out pages the theme brings, such as an About page, which a site gets as drafts.
Package	Name and credit the theme, check it, and submit it

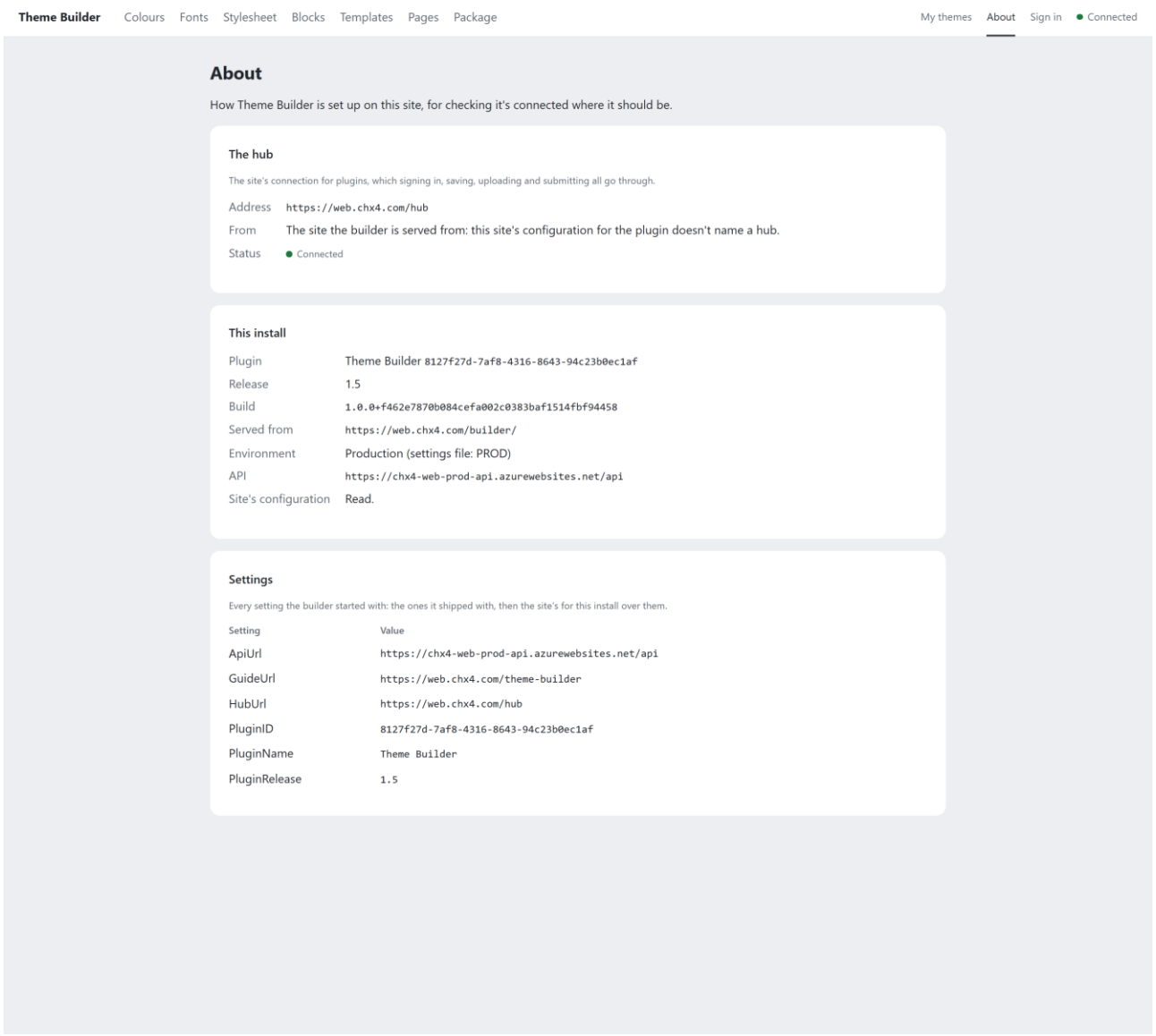
Page	What you do there
	or download it.

At the right of the menu, set a little apart, are the pages that look after the builder itself:

Page	What you do there
My themes	Start a theme, or open, rename, copy or delete one.
About	How Theme Builder is connected to the site, for when something isn’t working.
Sign in	Sign in or register. Once you’re signed in, it shows your name.

Last of all, a dot shows whether Theme Builder is connected to the site. Signing in, saving to your account, uploading images and submitting all need **Connected**. Everything else works without it.

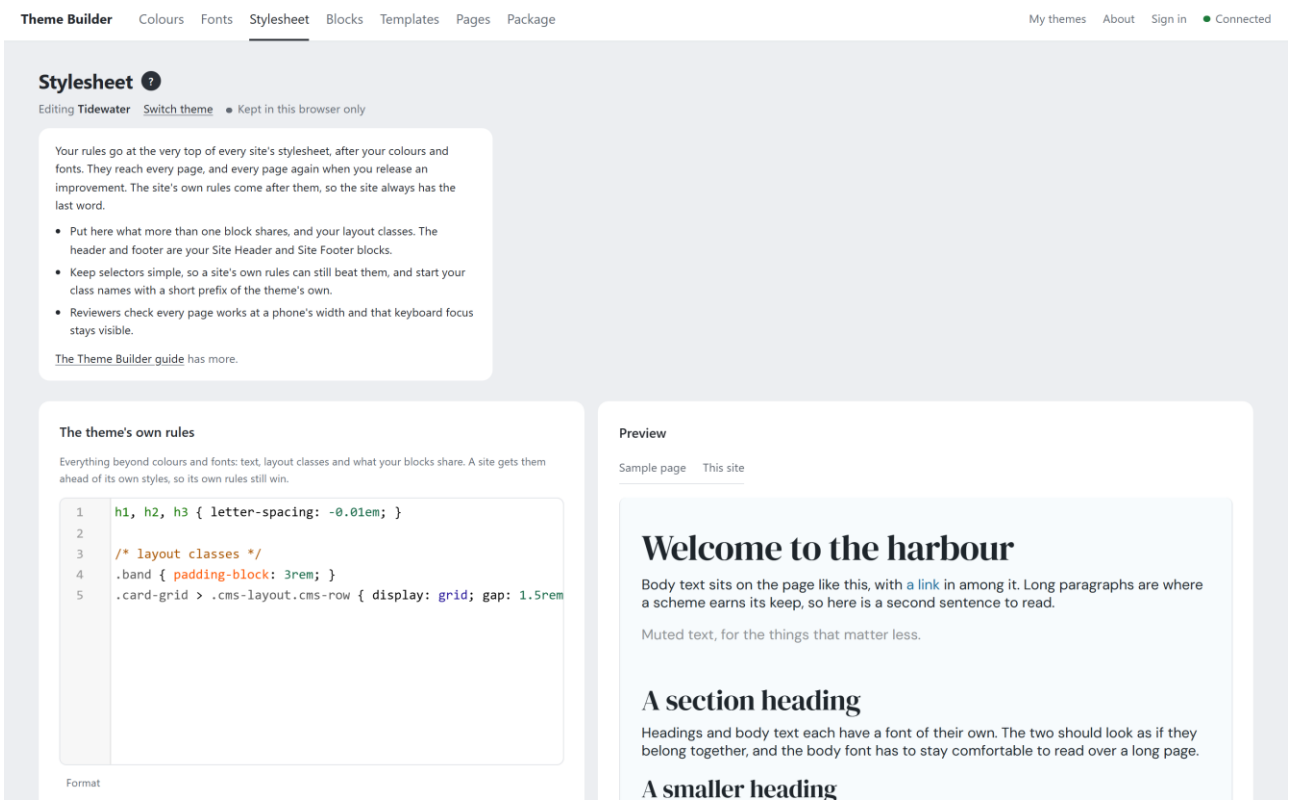
If it says **Offline**, Theme Builder keeps trying to reconnect on its own, every half a minute once it has been down a while. Click the status to open **About**, which shows how Theme Builder is connected, and click **Reconnect now** there to try again straight away. If it still won’t connect, send the people who run the site a copy of the About page.



The About page

Notes on each page

Beside the heading of each step's page is a **?**. Click it for that page's notes: what the page is for, how it fits with the others, and what reviewers check there. Click it again to hide them. On the home page, **How a theme fits together** sums up the whole of a theme on one card.



A page's notes, open

Your work is kept as you go

There's no **Save** button. Every change is kept the moment you make it.

Above each page's editor, a line says which theme you're working on and where it's kept:

Saved to your account

- **Kept in this browser only**: you aren't signed in. Your themes stay in this browser on this device, and nowhere else. Clearing the browser's site data deletes them.
- **Saved to your account**: you're signed in, and each change goes to your account a moment after you make it. Sign in on another browser or device and your themes are there too.
- **Saving…**: a change is on its way to your account.
- **Not saved: can't reach the site**: the change is safe in this browser, and goes to your account as soon as the connection comes back.

> **Tip:** You can design a whole theme without an account, but you need one to submit it, and signing in is the only way to keep your work safe if something happens to this browser. See *Your account*.

Before you start

A theme is made of two kinds of thing:

- **Styling**, which every page of a site gets as soon as it installs the theme: the colours, the fonts and the theme's stylesheet.
- **Content**, which the site's own content creators choose to use: the blocks they place on their pages, the templates they start new pages from, and draft pages for them to fill in.

A site’s content always belongs to the site. Installing your theme adds to it; it never replaces or deletes the pages a site already has.

How a theme fits together, next, shows how the parts build on each other on a site, and what that means for where you put your CSS.

How a theme fits together

Each page of Theme Builder makes one part of a theme, but on a site the parts work together: the colours feed the stylesheet, the stylesheet styles the blocks, the blocks make up templates, and pages are made from templates. Knowing where each part ends up tells you where to put a rule, and what a site sees when you release a new version of your theme.

Styling, in the order a site loads it

A page of a site using your theme is styled by these, in this order. Where two rules are equally specific, the later one wins.

	What	Made on	Where it is on the site	What it reaches
1	The platform's own styles	(chx4-Web's)	The platform's stylesheets	Every page: buttons, alerts, cards, menus, forms
2	Your colours and fonts	**Colours**, **Fonts**	The top of your theme's stylesheet, as variables such as `--primary`	Everything in 1, through the variables
3	Your Site Header and Site Footer	**Blocks**	A stylesheet of their own, before the site's	The header and footer of every page
4	Your own rules	**Stylesheet**	The very top of the site's own stylesheet, in a section marked as your theme's	Every page
5	The site's own rules	(the site's)	The rest of the site's stylesheet, after yours	Every page
6	A page's own CSS	**Templates**, **Pages** (the CSS tab), and each block placed there	With the page, around its content	That page's content only

What follows from the order:

- **Your colours restyle the platform.** The platform draws its buttons, alerts and menus from the colour variables, and works out every lighter and darker shade from them. Change `--primary` and every primary button, link and badge follows. That's why your own rules should use the variables too, such as `color: var(--primary)`, rather than a fixed colour.
- **The site always has the last word.** The site's own rules come after yours, so a site can change anything it doesn't like without editing your theme. Keep your selectors simple, like `.tw-hero h1` rather than `body main div.content .tw-hero > h1`, so a site's simple rule can still beat them.
- **A page's CSS wins inside the page.** It's scoped to the page's content, which also makes it outrank the stylesheets for anything in that content. Use it for that design alone.

Content, from block to page

Content is made in three steps, and each step **copies** the one before:

1. A **block** is made once, on **Blocks**: its content and its CSS.
2. Placing a block on a **template** or **page** puts a copy of its content there. Its CSS goes into the template's or page's own CSS, in a region of its own: once, however often the block is placed.
3. A **page** started from a template gets a copy of the template's design and CSS. Your own pages can start from a template too (see *Pages*), and so can every page a site's content creators make.

So in the sample theme, the Hero block's CSS (`.tw-hero { ... }`) is in the Hero block, in the Home template's CSS (because Home places the Hero), and in the About us page's CSS (because About us started from Home).

Once a copy is made it's on its own. Editing the Hero block afterwards doesn't change the Home template, and editing the Home template doesn't change the About us page.

What a site sees when you release a new version

When you raise **Release** and submit again, a site that updates to the new release gets:

What you changed	What changes on the site
Colours, fonts, your own rules	Every page, at once: your section of the site's stylesheet is replaced. If the site edited it, the update asks first, and keeps the site's version below yours, commented out.
A block	The site's copy of the block. Pages that already place it keep the copy they have, until a content creator chooses **Reset Content** on it.
A template	The site's template. Pages already made from it don't change.
Your pages	Only pages new in this release are added. Pages the site already has stay as the site left them.
The Site Header or Site Footer the site shows	A new draft, for the site to check and publish. Until then it shows the one it has.

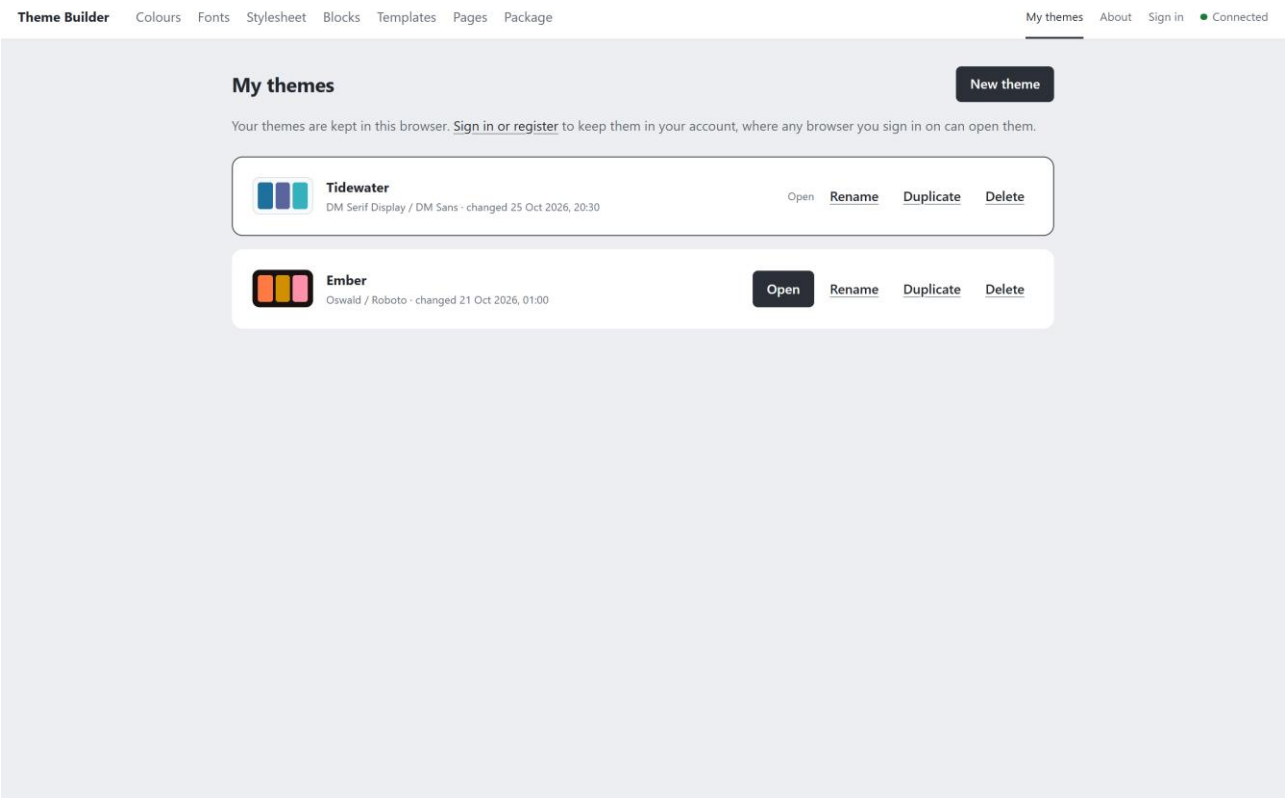
So, where should a rule go?

- **Colours** belong on **Colours**, and in CSS as the variables, never as fixed colours. They then follow if a site changes one, and the readability checks cover them: a fixed colour is checked by no one.
- **Anything more than one block uses**, such as how buttons or headings look, or a layout class, belongs in **Stylesheet**. It reaches every page, and every page again when you improve it.
- **What only one block needs** belongs in that block's CSS, under a class of the block's own (`.tw-hero`). Keep it small: it's copied into every template and page that uses the block, and a later fix to it doesn't reach pages that already have it.
- **What only one design needs** belongs in that template's or page's CSS.
- **The header and footer** belong in the **Site Header** and **Site Footer** blocks.

> **Tip:** Start your class names with a short prefix of your theme's, such as `tw-` for Tidewater. A site's own stylesheet may already use a name like `.hero`; when a site installs your theme, chx4-Web tells it which of your classes its own rules already style, since its rules will win there.

My themes

You can work on as many themes as you like. **My themes** lists them, most recently changed first, and is where you switch between them. Every other page works on the theme that's open.



My themes, with Tidewater open

Each theme shows its main colours, its heading and body fonts, and when it was last changed. The open theme has a blue border and says **Open**.

Start a theme

Click **New theme**. Theme Builder makes an untitled theme, opens it and takes you to **Colours**, where most themes start.

Switch to another theme

Click **Open** on the theme. You can also get here from any page with **Switch theme**, beside the theme's name at the top of the page.

Rename a theme

Click **Rename**, type the new name, and press **Enter**. You can also change the name on the **Package** page.

Copy a theme

Click **Duplicate**. The copy is a new theme of its own, with everything the original has. Use it to try out a different direction without losing what you have, or to start a second theme from the first.

> **Note:** A copy is a separate theme as far as chx4-Web is concerned. Submitting it adds another theme to the catalogue; it doesn't update the original.

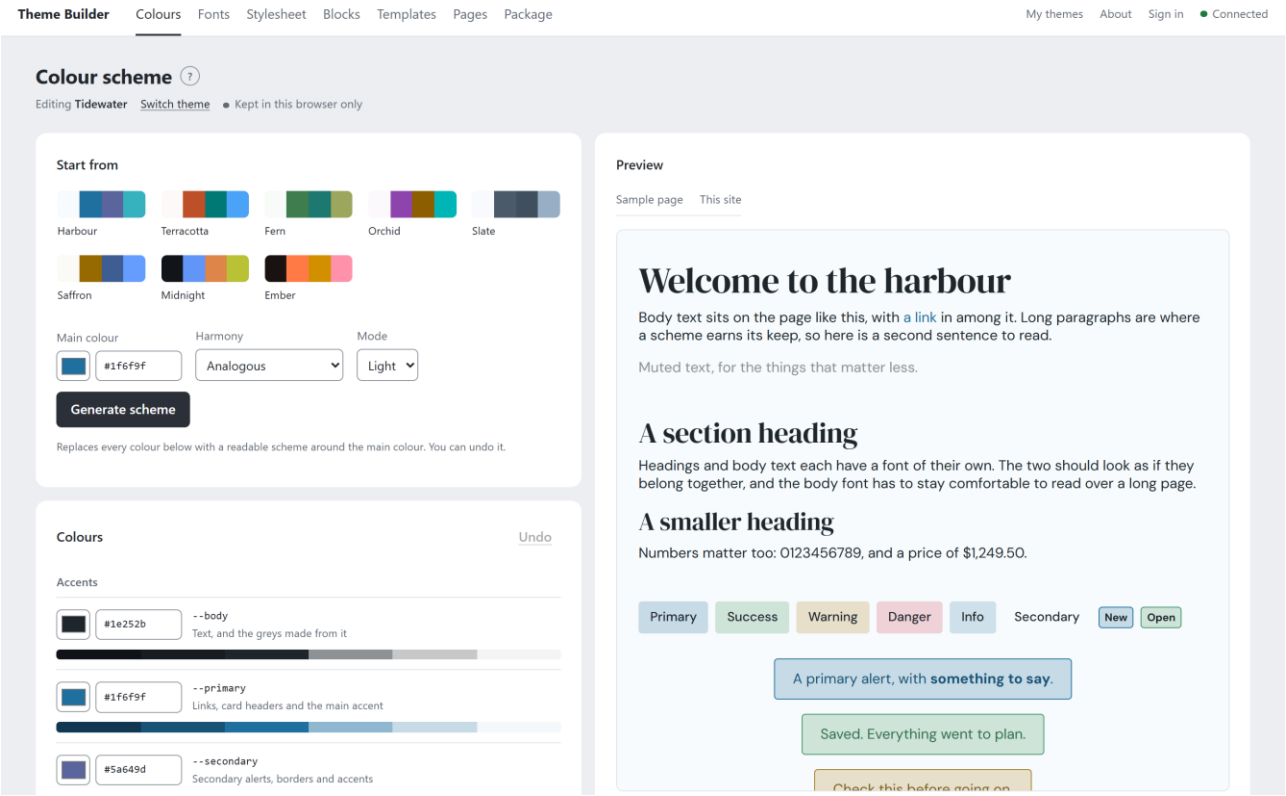
Delete a theme

Click **Delete**, then **Delete it** to confirm, or **Keep it** if you changed your mind. A deleted theme is gone from every browser you're signed in on.

Deleting a theme here doesn't take it out of the catalogue if you've already submitted it.

Colours

Colours sets the theme's colour scheme. A chx4-Web site draws everything from a small set of colours, and works out every lighter and darker shade from them, so choosing a dozen or so colours here restyles every page, button, alert and menu on the site.



The Colours page

The left of the page holds the colours; the right shows them on a sample page, and the stylesheet they make.

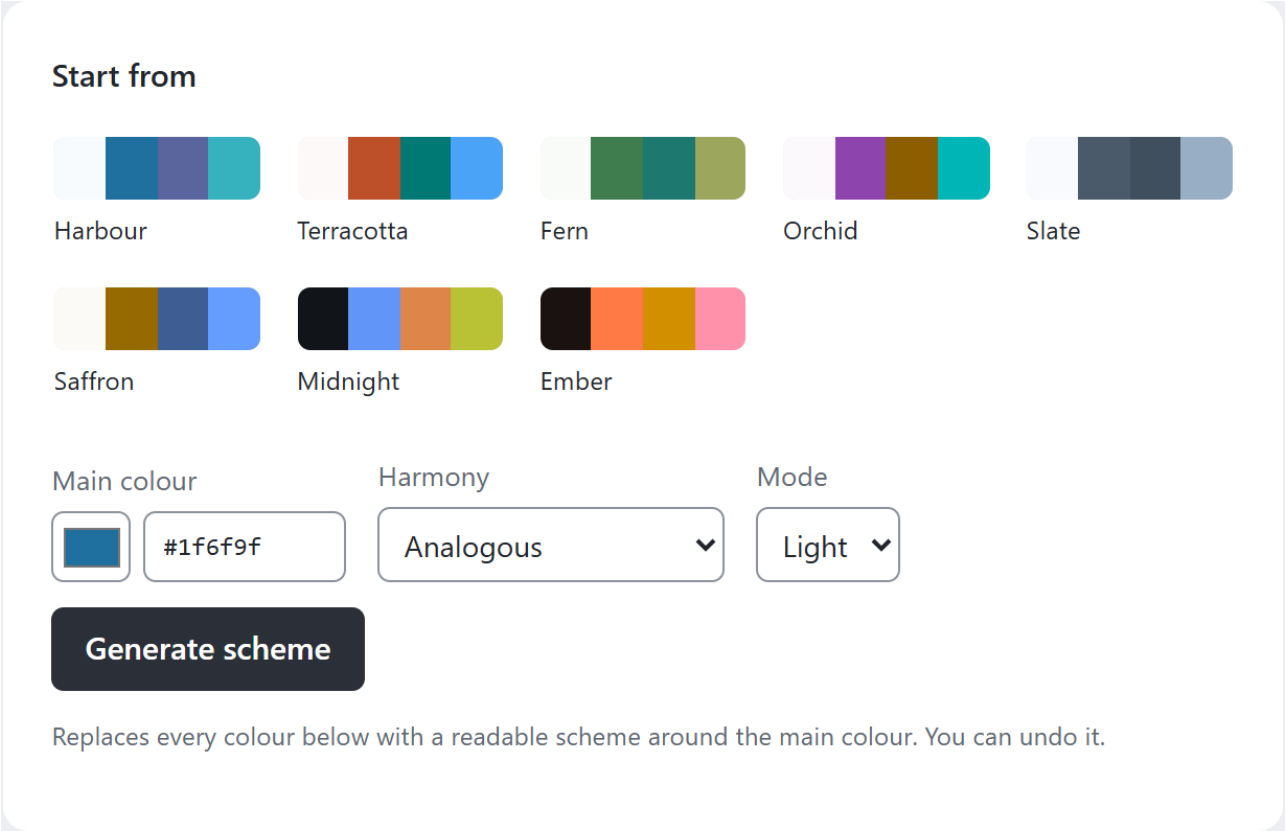
Choosing colours

Reviewers don't judge whether your colours look good: taste differs, and a site picks a theme it likes. They do refuse a scheme that's hard to read. Beyond that, a scheme is easiest to use when each colour does one job:

- **Primary** is what people act on: links and buttons. Make it stand out from the page and from body text, so a link is obvious without hunting for it.
- **Secondary** supports primary: borders, quieter buttons and accents.
- **Highlight** draws the eye. Use it sparingly: when everything is highlighted, nothing is.
- **Info**, **success**, **warning** and **danger** carry meanings visitors already know. Keep them recognisably blue, green, amber and red, whatever the rest of the scheme does.
- **Never let colour alone carry a message.** Some visitors can't tell red from green, so an error needs words as well as red.
- **A dark scheme needs extra care.** Every pairing still has to pass, and thin text looks thinner on a dark page.

Then try it on a real page: switch the preview to **This site** to see your colours on one of this site's own pages, with its own words and pictures.

Start from a scheme



Start from

The quickest start is one of the ready-made schemes under **Start from**. Click one and every colour is set.

To make a scheme of your own around one colour:

1. Pick a **Main colour**, or type its hex code (such as `#1f6f9f`) beside it.
2. Choose a **Harmony**: how the other colours relate to the main one.
    - **Analogous**: its neighbours on the colour wheel. Calm, and hard to get wrong.
    - **Complementary**: its opposite, for the most contrast between accents.
    - **Split complementary**: either side of its opposite. Contrast with less clash.
    - **Triadic**: three colours evenly spaced. Lively.
    - **Monochrome**: shades of the one colour.
3. Choose **Light** or **Dark** for **Mode**: dark text on a light page, or light text on a dark one.
4. Click **Generate scheme**.

Generating replaces every colour, and makes a scheme that's readable to begin with. You can undo it.

Adjust a colour

Colours

Undo

Accents

#1e252b

--body

Text, and the greys made from it



#1f6f9f

--primary

Links, card headers and the main accent



#5a649d

--secondary

Secondary alerts, borders and accents



#36b1be

--highlight

Decoration and accents



#3b83aa

--info

Information: alerts, buttons and badges



#3d9466

--success

Success: alerts, buttons and badges



#a08029

--warning

Warnings: alerts, buttons and badges



#bf4a5d

--danger

Errors: alerts, buttons and badges



Page

#f7fbfd

--site-background

The page

#ffffff

--surface

Cards, inputs, menus and dialogs

#ffffff

--on-primary

Text on the primary colour

Under **Colours**, each colour says what the site uses it for. Change one with its colour picker or by typing a hex code. The preview follows as you go.

The colours come in groups:

- The text colour and the **accents**: primary, secondary, highlight, and the colours for information, success, warnings and errors. The accents show the shades the site makes from them.
- The **page**: the page's background, the surface of cards, inputs and menus, text on the primary colour, and the footer.
- **Mixing**: what the lighter and darker shades are mixed toward. Leave these alone unless you know you need them.

Undo takes back the last change, one at a time.

Keep it readable

Readability

All 17 checks pass WCAG AA (4.5:1 for text).

Aa	Body text on the page `--body` on `--site-background`	14.89:1 Pass
Aa	Text on cards, inputs and menus `--body` on `--surface`	15.50:1 Pass
Aa	Links `--primary` on `--site-background`	5.26:1 Pass
Aa	Card headers `--on-primary` on `--primary`	5.48:1 Pass
Aa	The "Go to Tenant" button `--primary` on `--primary-lightest`	5.12:1 Pass
Aa	Primary buttons and badges `--body` on `--primary-lighter`	10.86:1 Pass
Aa	Success buttons and badges `--body` on `--success-lighter`	11.64:1 Pass
Aa	Warning buttons and badges `--body` on `--warning-lighter`	11.69:1 Pass
Aa	Danger buttons and badges `--body` on `--danger-lighter`	10.95:1 Pass
Aa	Info buttons and badges `--body` on `--info-lighter`	11.42:1 Pass
Aa	Primary alerts `--primary-darker` on `--primary-lighter`	5.77:1 Pass
Aa	Secondary alerts `--secondary-darker` on `--secondary-lighter`	5.92:1 Pass
Aa	Success alerts `--success-darker` on `--success-lighter`	4.51:1 Pass
Aa	Warning alerts `--warning-darker` on `--warning-lighter`	4.54:1 Pass
Aa	Danger alerts `--danger-darker` on `--danger-lighter`	5.27:1 Pass
Aa	Info alerts	4.87:1

All checks passing

Readability checks every pairing of text and background the site actually draws, such as body text on the page, text on buttons, links, alerts and the footer, against the WCAG AA standard: 4.5 to 1 for text. Each line shows the pairing, its contrast and whether it passes.

When a check fails, the line shows **Fix**. Fixing changes only how light or dark one of the colours is, keeping its hue, so the scheme still looks like yours. **Fix all** fixes every failing check at once, and never leaves more checks failing than before.

Readability

Fix all

7 of 17 checks fall short of WCAG AA (4.5:1 for text).

Aa	Body text on the page `--body` on `--site-background`	1.55:1 Fail	Fix
Aa	Text on cards, inputs and menus `--body` on `--surface`	1.61:1 Fail	Fix
Aa	Primary buttons and badges `--body` on `--primary-lighter`	1.13:1 Fail	Fix
Aa	Success buttons and badges `--body` on `--success-lighter`	1.21:1 Fail	Fix
Aa	Warning buttons and badges `--body` on `--warning-lighter`	1.21:1 Fail	Fix
Aa	Danger buttons and badges `--body` on `--danger-lighter`	1.14:1 Fail	Fix
Aa	Info buttons and badges `--body` on `--info-lighter`	1.19:1 Fail	Fix
Aa	Links `--primary` on `--site-background`	5.26:1 Pass	
Aa	Card headers `--on-primary` on `--primary`	5.48:1 Pass	
Aa	The "Go to Tenant" button `--primary` on `--primary-lightest`	5.12:1 Pass	
Aa	Primary alerts `--primary-darker` on `--primary-lighter`	5.77:1 Pass	
Aa	Secondary alerts `--secondary-darker` on `--secondary-lighter`	5.92:1 Pass	
Aa	Success alerts `--success-darker` on `--success-lighter`	4.51:1 Pass	
Aa	Warning alerts `--warning-darker` on `--warning-lighter`	4.54:1 Pass	
Aa	Danger alerts `--danger-darker` on `--danger-lighter`	5.27:1 Pass	

Checks failing after the text colour was made too pale

Some pairings can’t be fixed from the colours alone, such as muted text, which the site always draws half way between the text colour and the page. They’re listed apart, with what to do instead.

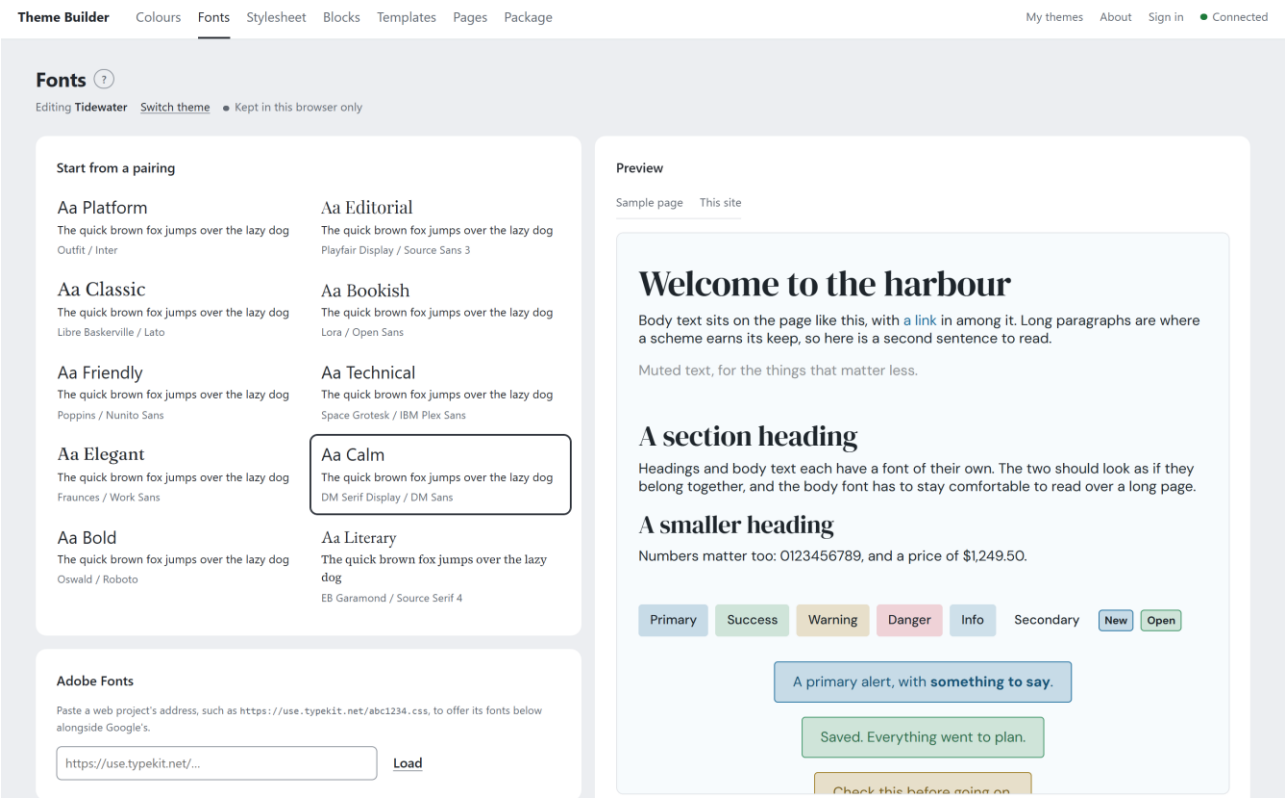
> **Tip:** A theme can be submitted with failing checks, but people will struggle to read a site that uses it. Fix them unless you have a good reason not to.

The stylesheet

Stylesheet, at the bottom right, shows the CSS the colours and fonts make. **Copy** and **Download** give you a copy of it, which is handy for trying the colours on a site by hand. See *Package* for using a theme on one site.

Fonts

Fonts chooses two fonts: one for headings and one for body text. Every heading and paragraph on a site using the theme takes them up.



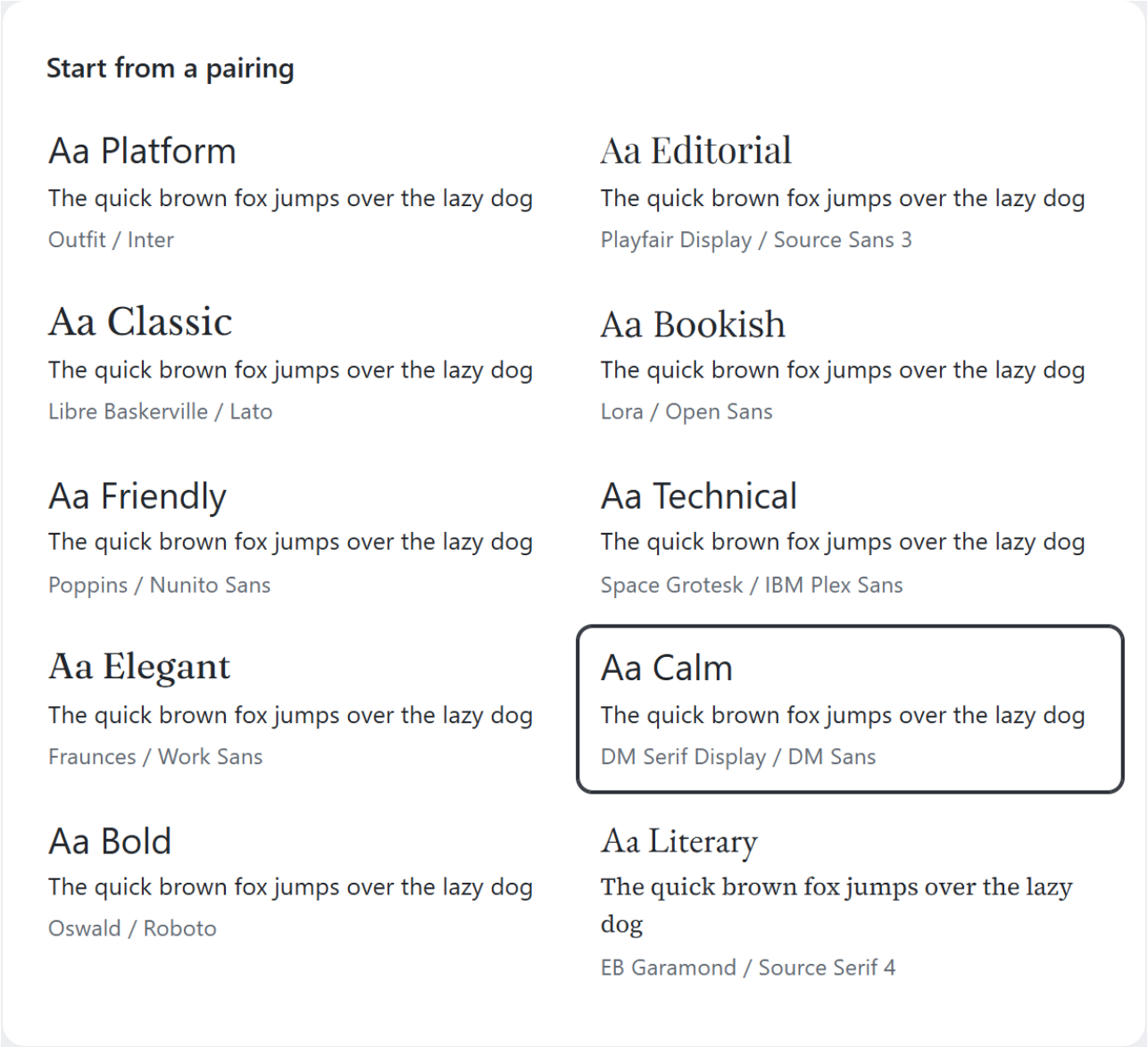
The Fonts page

Choosing fonts

As with colours, reviewers don't judge whether fonts look good, but they do check text is readable, and they refuse fonts you can't share. A few things make fonts work for every site:

- **Choose a body font made for reading**: open shapes and a generous height for its small letters, at regular weight. Keep decorative and display fonts for headings.
- **Make the two fonts different on purpose**, such as serif headings with a sans-serif body. Two fonts that are nearly the same look like a mistake.
- **Two families is plenty.** Every family and weight is downloaded by every visitor to every page.
- **Check the characters sites will need**, such as accented letters, if the theme may be used in other languages.
- **Use fonts every site may use.** Google Fonts are free for any site. An Adobe Fonts kit only serves the sites listed in it (see below).

Start from a pairing



Font pairings

Under **Start from a pairing** are heading and body fonts that work well together. Each shows its fonts in use. Click one to use both.

Choose a font

Headings

- ○ System font Nothing to download

Sans serif

- ○ Inter
- ○ Outfit
- ○ Roboto
- ○ Open Sans
- ○ Lato
- ○ Source Sans 3
- ○ Nunito Sans
- ○ Work Sans
- ○ IBM Plex Sans
- ○ DM Sans
- ○ Manrope
- ○ Poppins
- ○ Montserrat
- ○ Raleway
- ○ Figtree
- ○ Space Grotesk

Serif

- ○ Lora
- ○ Merriweather
- ○ Playfair Display
- ○ Source Serif 4

Headings and **Body text** each list fonts to choose from, drawn in themselves. Choose the system font to use the fonts already on every visitor's device: they load instantly, but look different from one device to the next.

To use a Google Font that isn't listed, type its family name as fonts.google.com shows it, and click **Use**.

Use Adobe Fonts

If you have an Adobe Fonts (Typekit) web project, its fonts can be used too.

1. In Adobe Fonts, copy your web project's address. It looks like `https://use.typekit.net/abc1234.css`.
2. Paste it under **Adobe Fonts** and click **Load**. The project's fonts are added to the **Headings** and **Body text** lists.
3. Choose them as you would any other font.

Remove takes the project away again.

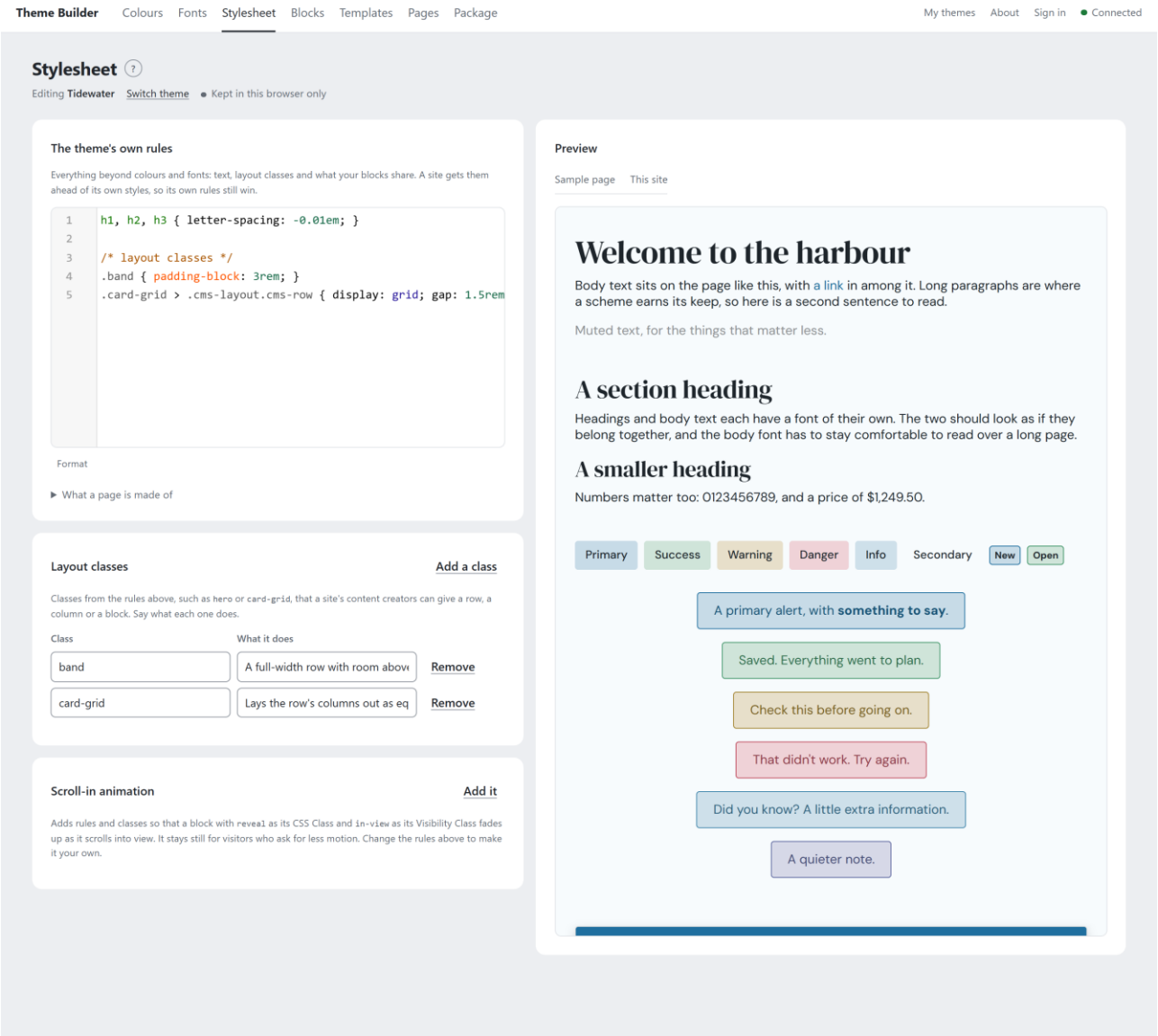
> **Note:** An Adobe Fonts web project only serves the websites listed in it. Add `web.chx4.com` to your project to see its fonts in Theme Builder's preview. A site that installs your theme must be on your project too, or use a project of its own with the same fonts.

What the theme loads

What the theme loads shows the font stylesheets a site will link to, and the CSS that names the fonts. A site installing the theme chooses whether to add the font stylesheets. If it doesn't, headings and text fall back to similar system fonts.

Stylesheet

Stylesheet holds the theme's own CSS: everything it styles beyond its colours and fonts. Use it for headings and text, the layout classes your templates use, and anything more than one of your blocks shares. The header and footer have blocks of their own, the **Site Header** and **Site Footer** (see *Blocks*), and *How a theme fits together* says what belongs where.



The Stylesheet page

Write the theme's rules

Write your CSS under **The theme's own rules**. The preview on the right follows as you type.

A site installing the theme gets one stylesheet: the colours and fonts first, then these rules. It goes at the top of the site's own stylesheet, so anything the site adds afterwards still wins.

Open **What a page is made of** for the parts of a page you can style:

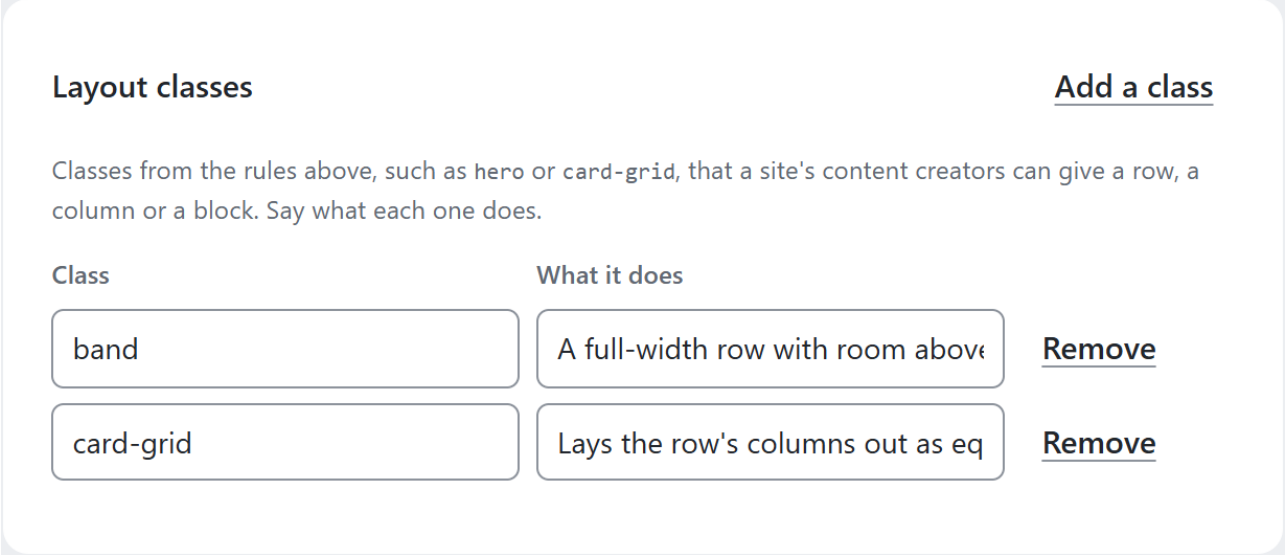
- Each row of a page is `.cms-canvas`, and inside it `.cms-layout.cms-row`. Each column of a row is `.cms-layout.cms-column`.

- The site's header and footer are `.site-layout > header` and `.content-wrapper > footer`, but their own styles belong in your Site Header and Site Footer blocks.
- The colours and fonts are variables: `var(--primary)`, `var(--site-background)`, `var(--font-family-headings)` and the rest. Use them rather than fixed colours, so your rules follow if a site changes its colours.
- An image uploaded on the **Blocks** page can be used by its address, in `url(…)`.

Two things stop a theme being accepted, and the page warns you about both:

- A comment that starts with `theme:`. Installing a theme writes comments like that, so the platform keeps them for itself.
- An image or font from another website. Upload images on the **Blocks** page instead.

List your layout classes



Layout classes

A layout class is a class in your stylesheet that a site's content creators give a row, a column or a block in the page designer, such as `band` for a full-width row, or `card-grid` to lay columns out as cards. Listing them tells the site what each does, and the designer suggests them.

1. Click **Add a class**.
2. Type the class's name, without the dot, under **Class**.
3. Say what it does under **What it does**, in a few words.

If the stylesheet has no rule for a class yet, it says **No rule for it yet**. **Remove** takes a class off the list; it doesn't change the stylesheet.

Add a scroll-in animation

A site adds a block's **Visibility Class** once a quarter of the block is on screen, but has no animations of its own: a theme brings them. Under **Scroll-in animation**, click **Add it**. Your rules get a `reveal` class and an `in-view` class, and both join your layout classes. A block given `reveal` as its **CSS Class** and `in-view` as its **Visibility Class** waits a little below its place, then fades up into it as a visitor scrolls to it. Visitors who have asked their device for less motion see it fade without moving.

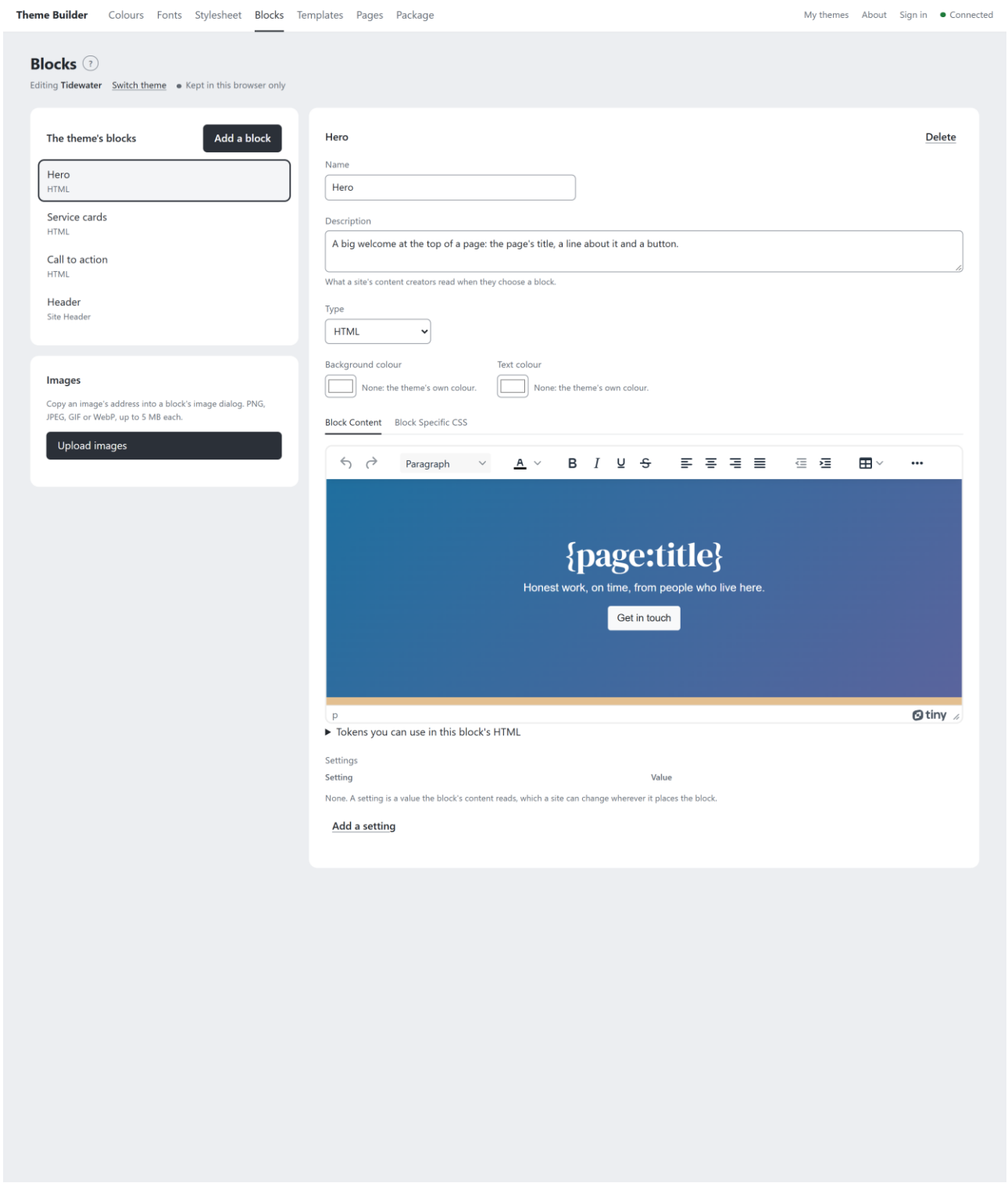
The rules are ordinary ones in your stylesheet, so change them to make the animation your own. Put the starting look in the class the block always has (`reveal`), not in the one it gets on arriving: an

animation written only in `in-view` shows the block, then hides it and fades it back in. Template previews play the animation as you scroll.

Blocks

A block is a ready-made piece of content, such as a hero, a call to action or a row of cards. A site that installs your theme gets its blocks, and its content creators place them on their own pages and fill in their own words. **Blocks** is where you make them, and upload the images they use.

Theme Builder edits blocks with the same editors chx4-Web's own sites use, so what you make is exactly what a site's content creators go on to edit.



The Blocks page, with the Hero block open

Add a block

1. Click **Add a block**. The new block opens on the right.
2. Give it a **Name** and a **Description**. A site's content creators read both when they choose a block, so say what it's for.
3. Choose its **Type** (see below).
4. Write its content on the **Block Content** tab. The editor draws the block in your theme's colours and fonts, so editing it is previewing it.
5. Write its styles on the **Block Specific CSS** tab. Click back to **Block Content** to see what they did.

To work on another block, click it in the list. **Delete**, then **Delete it**, removes the open block.

Block types

Type	What it is
HTML	Content you write in the editor. The usual choice.
Rich Text	Text that content creators edit in place on their page.
Gallery	A grid of pictures. The content is how each picture is shown.
Carousel	Pictures that slide one after another, each with words of its own.
Horizontal Scroller	A row of pictures or cards that scrolls sideways.
Menu	One of the site's own menus, drawn as plain lists for the block's CSS to style. Choose which under **Menu**.
Site Header	The whole header at the top of every page: its HTML and CSS. See below.
Site Footer	The whole footer at the bottom of every page: its HTML and CSS. See below.

For a gallery, carousel or scroller, the content is a template for one picture. Use the tokens listed under the editor for the picture's address and words: `{image:url}` is the picture, and an `{item:...}` slot, such as a gallery picture's `{item:caption}` or `{item:link}`, is copy each picture is given where a site places the block. A picture's address must be `{image:url}`: a package with any other token there is refused.

A Menu block has no content of its own: it shows what the site has. A site changes its menus in one place, however many pages show them.

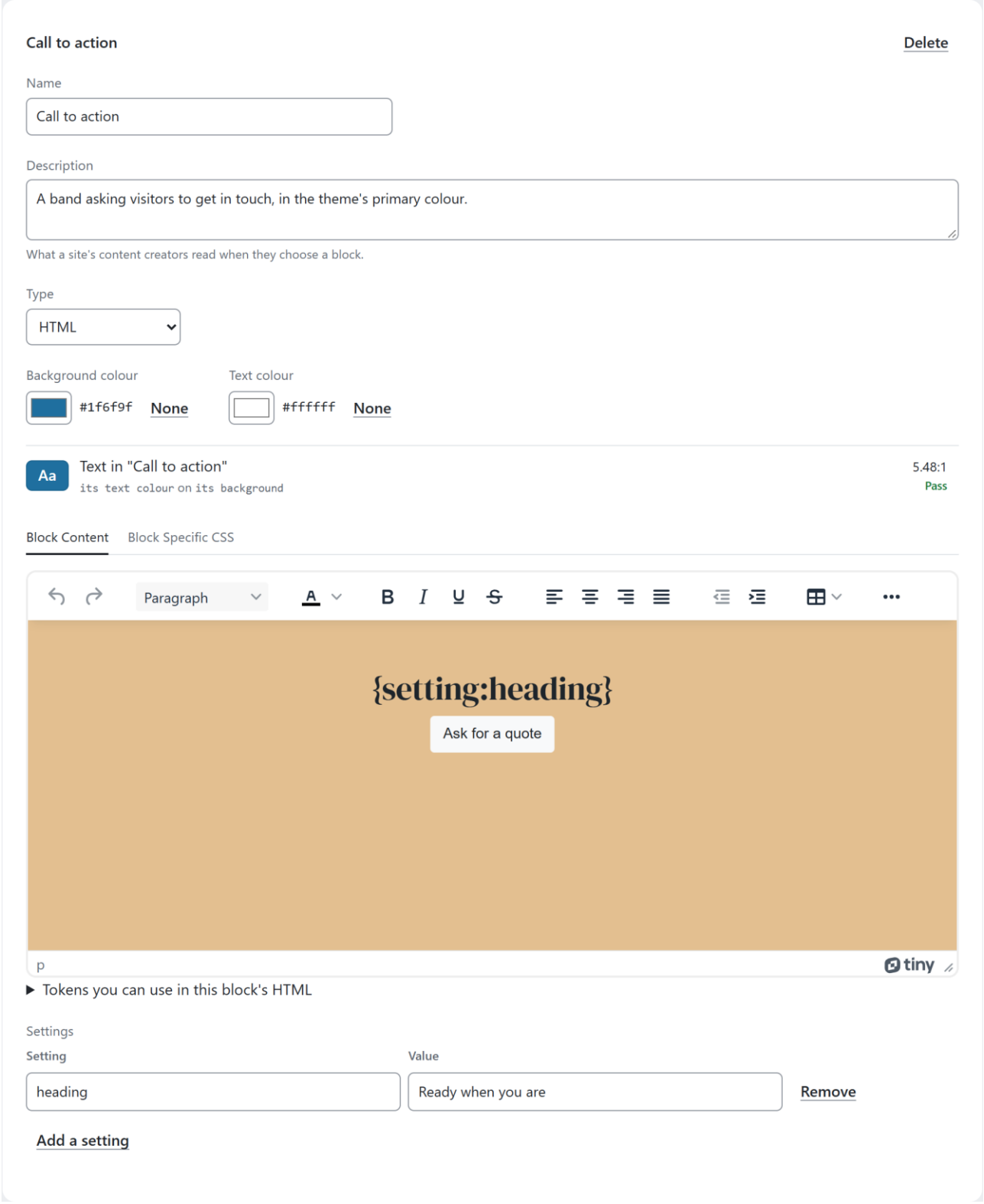
> **Note:** Sites no longer show panels, so there's no Panel block. If a theme you made earlier has one, the editor says so: change its type or delete it. What a footer panel said belongs in a Site Footer block.

Give a block its own colours

Background colour and **Text colour** give the block colours of its own. Leave them as **None** to use the theme's. When a block sets either, a readability line below shows whether its text is easy to read on its background.

Use tokens and settings

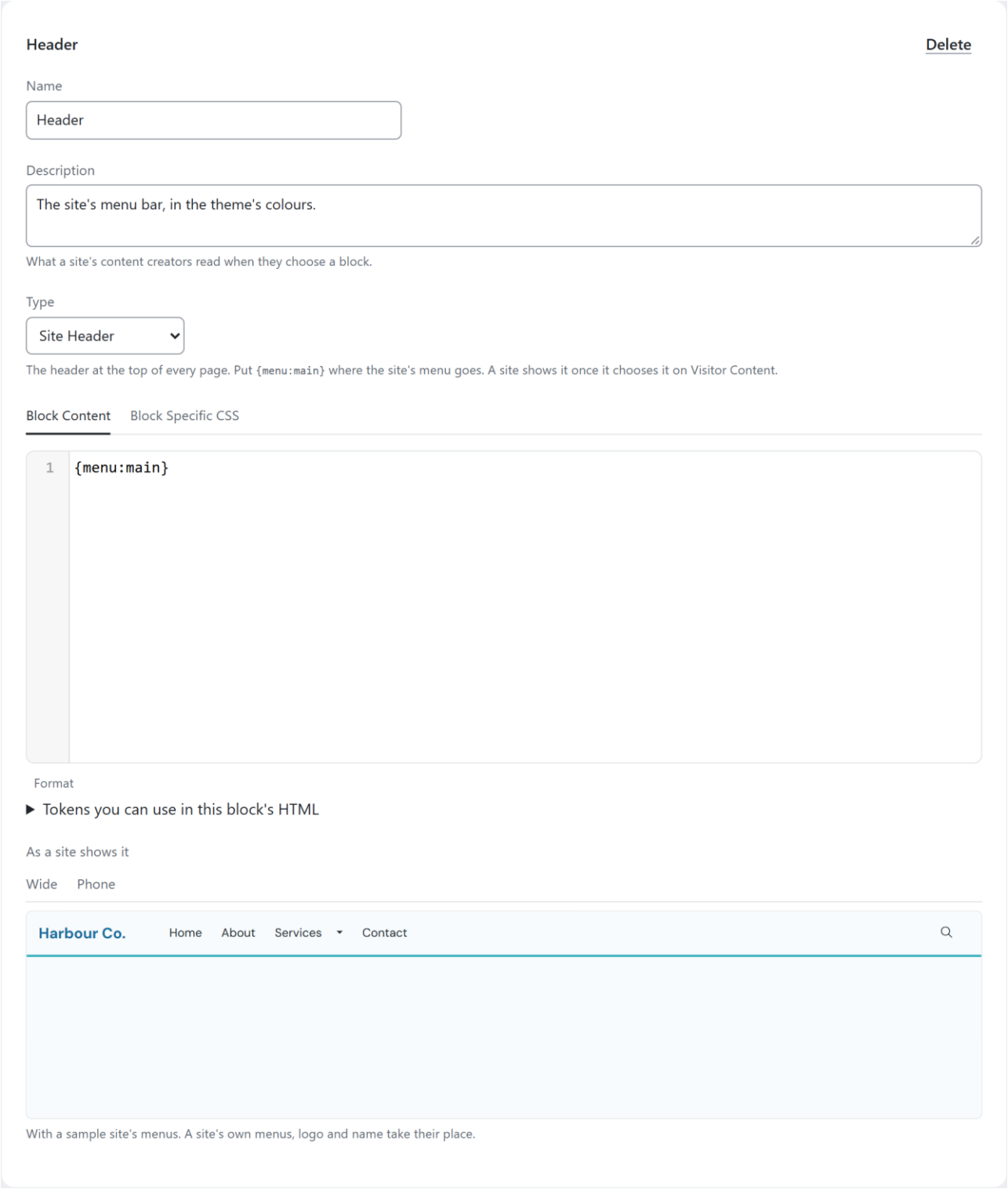
Open **Tokens you can use in this block's HTML** under the editor for the placeholders a block can use. They're filled in on the page the block is placed on: `{page:title}`, for example, becomes the title of the page.



A block with a setting

A **setting** is a named value the block reads, which a site can change wherever it places the block. Click **Add a setting**, give it a name and a value, and use it in the content as `{setting:name}`. Here the Call to action block's heading is the setting `heading`, written in the content as `{setting:heading}`.

The site's header and footer



A Site Header block

A **Site Header** or **Site Footer** block is the whole header or footer a site shows on every page: its HTML in **Block Content** and its styles in **Block Specific CSS**. A new one starts as the header or footer a site comes with, for you to change.

The menus stay the site's own, edited on its Visitor Content page. Put a menu token where a menu goes:

Token	What it shows
`{menu:main}`	The Main menu as the site's menu bar: the logo, the links, search, and the button that opens the menu on a phone.
`{menu:footer}`	The Footer menu's groups of links.

Either token works in either block, and each menu is drawn once, where its token first appears. A header without `{menu:main}` has no menu, logo or search, which is allowed: the editor and the **Package** page point it out in case you meant to have one. The `{site:...}` tokens work here too (see the list under **Block Content**).

Block Content is edited as code rather than in the visual editor. Below the tabs, **As a site shows it** draws the block with a sample site's menus in your colours, fonts and stylesheet. Click **Phone** to see it at a phone's width, where the header's menu folds behind its button. A site's own menus, logo and name take the samples' places.

A site that installs your theme gets them beside its own. It shows yours once it chooses them on its Visitor Content page, under **Header and Footer**. Template previews show them.

Images

Blocks and templates can use images you upload here.

1. Click **Upload images** and choose them: PNG, JPEG, GIF or WebP, up to 5 MB each.
2. Type what each image shows in the box beside it, for its alt text.
3. Click **Copy address**, and paste the address into the block editor's image dialog, or into CSS.

When you package the theme, its images go with it.

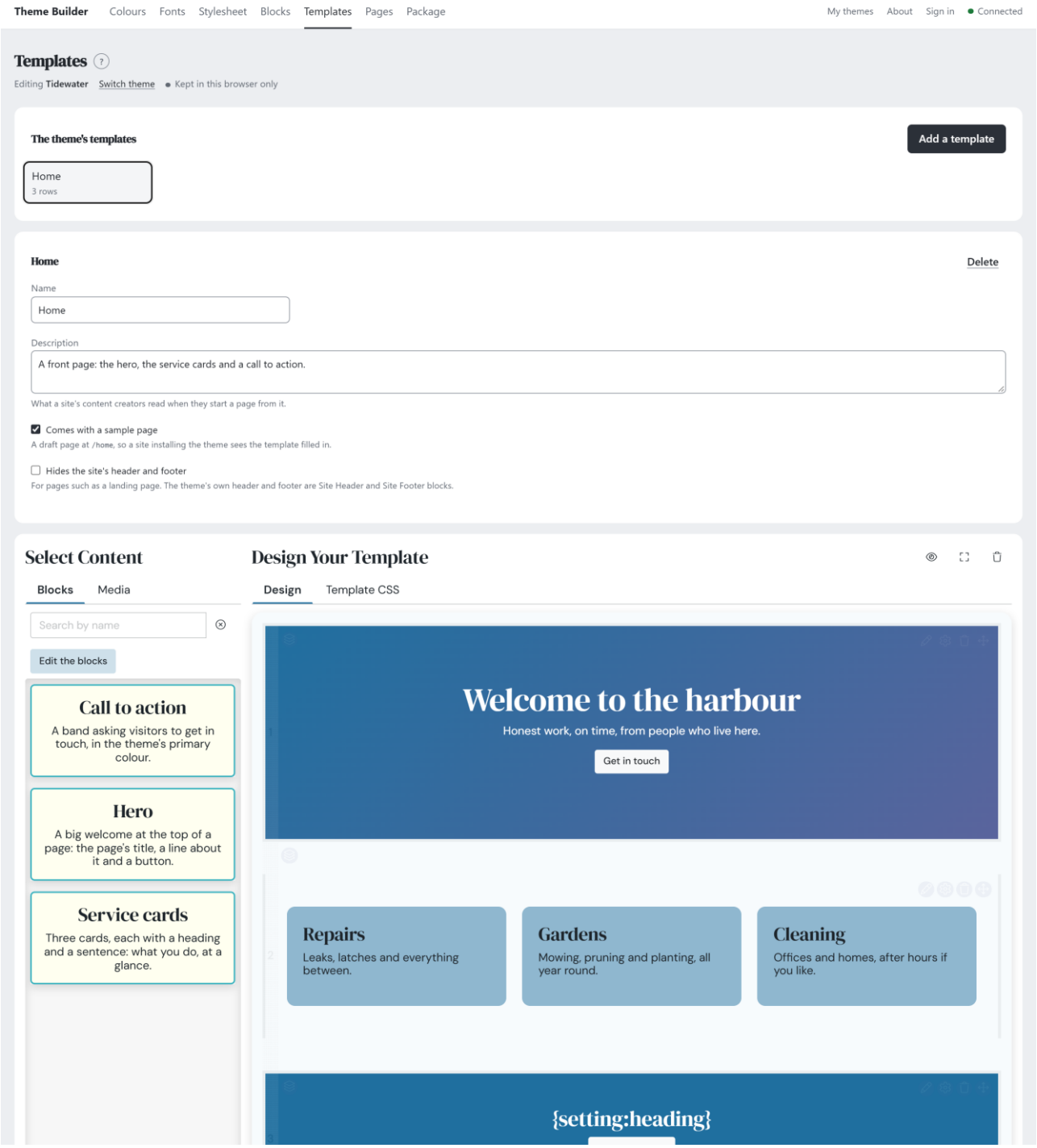
Adding images while you're offline

If Theme Builder isn't connected to the site, an image up to 1 MB is kept in the theme instead, and says **Not uploaded yet**. Use it just as you would an uploaded one. When the site is connected again, Theme Builder uploads it and updates every block, template and rule that uses it, by itself. You can even package the theme before then: the image goes into the package straight from the theme.

A bigger image has to wait until the site is connected. Your browser has room for only a few megabytes of themes, and keeps images held in the theme in that space.

Templates

A template is a page design, such as a home page, an article or a landing page, laid out with your theme's blocks. A site's content creators start new pages from it. **Templates** lays them out with chx4-Web's own page designer, the one sites use for their pages.



The Templates page, with the Home template open

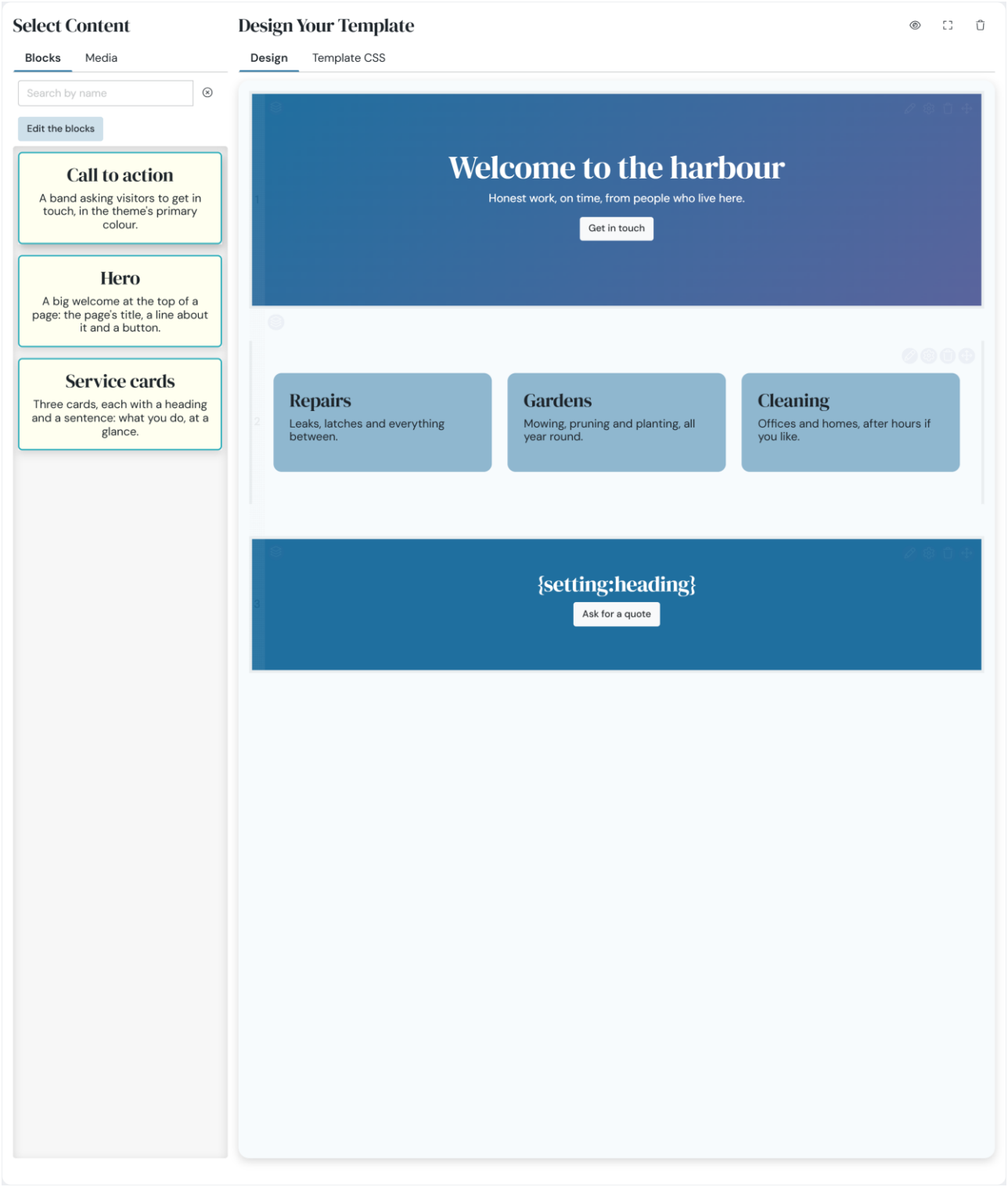
Add a template

1. Make some blocks first, on the **Blocks** page. The designer places the theme's blocks.
2. Click **Add a template**.

3. Give it a **Name** and a **Description**. Content creators read both when they start a page.
4. Lay it out in the designer below.

To work on another template, click it in the list. **Delete**, then **Delete it**, removes the open template.

Lay it out



The page designer

Drag a block from **Blocks** on the left onto the page. A marker shows where it will land: between rows for a row of its own, beside a block to put the two side by side, or above or below a block in a row with

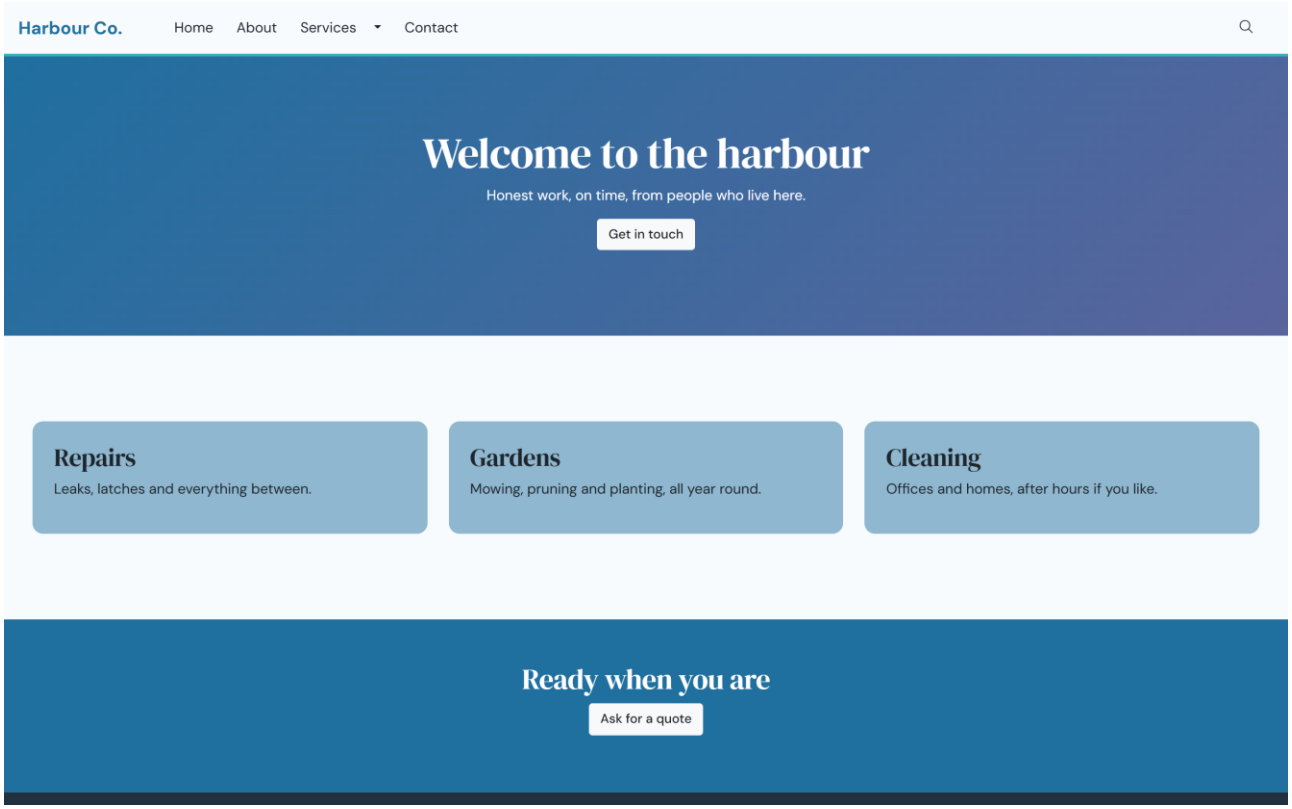
others to stack them in that column. The designer works as it does on a site (see chx4-Web's own guide, *The page designer*, for all of it):

- The icons on a row edit its block, change its settings, delete it or move it.
- A row and a column can be given a class: your layout classes are suggested.
- **Media** lists the images you uploaded on the **Blocks** page.

Each block you place brings its CSS into the template's own, on the designer's **Template CSS** tab (beside **Design**, and there in full screen too). Add any styles that belong to this template alone there, and click back to **Design** to see what they did.

Preview it

Click the eye above the designer to see the template as a page of a site using your theme: with your Site Header and Site Footer blocks (or the site's own, if the theme has none) filled with sample menus, and your colours, fonts and stylesheet.



The Home template's preview

Choose what comes with it

Comes with a sample page: the site gets a page started from the template as well, so it sees the design filled in. It arrives as a draft, for the site to publish or not. It's on by default.

Hides the site's header and footer: on pages started from this template, the site shows no header or footer, for a page such as a landing page that wants none. Your theme's own header and footer aren't made here: they're its **Site Header** and **Site Footer** blocks (see *Blocks*).

Blocks in any template can use these tokens:

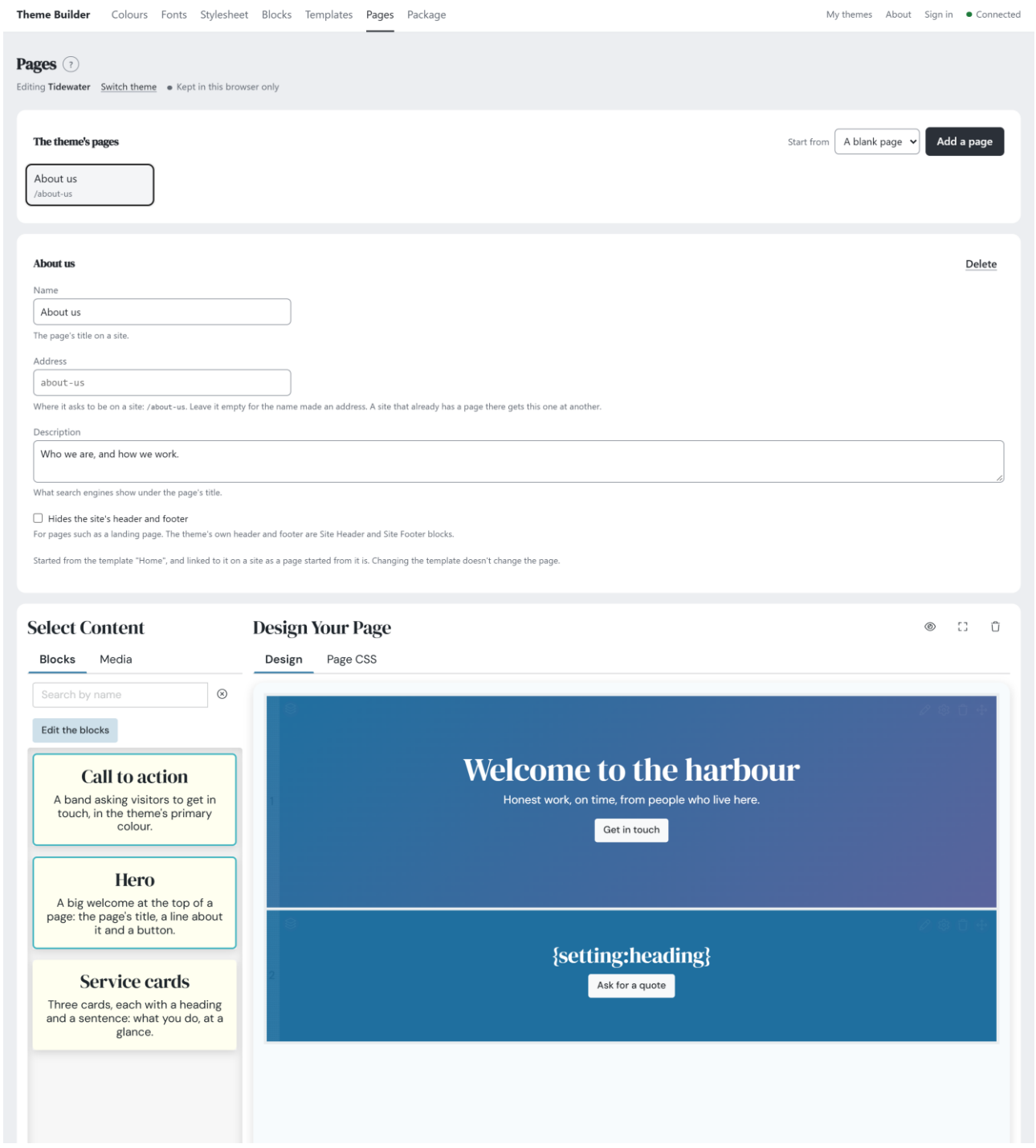
Token	What it shows

Token	What it shows
`{site:name}`	The site’s name.
`{site:logo}`	The site’s logo.
`{site:search}`	The site’s search box.
`{site:credit}`	“Theme by” and your name.

A site always shows your credit in the line below its footer, so you needn’t add `{site:credit}` anywhere.

Pages

Besides its templates, a theme can bring pages of its own, such as an About or a Contact page, laid out with your blocks. A site installing your theme gets them as drafts, ready for it to fill in with its own words and publish, or not. **Pages** lays them out with the same page designer as **Templates**.



The Pages page, with the About us page open

A template's sample page (see *Templates*) is a page too, but it's always a copy of its template. Add a page here when the theme should bring one that isn't.

Add a page

1. Make some blocks first, on the **Blocks** page. The designer places the theme's blocks.
2. Under **Start from**, choose **A blank page**, or one of your templates to start from a copy of its design. **Start from** only shows once the theme has a template.
3. Click **Add a page**.
4. Give it a **Name**: it's the page's title on a site.
5. Lay it out in the designer below, as you would a template.



The theme's pages, and what a new one starts from

A page started from a template is linked to it on the site, as a page a site starts from a template is. It's still a copy: changing the template afterwards doesn't change the page.

To work on another page, click it in the list. **Delete**, then **Delete it**, removes the open page.

Its address and description

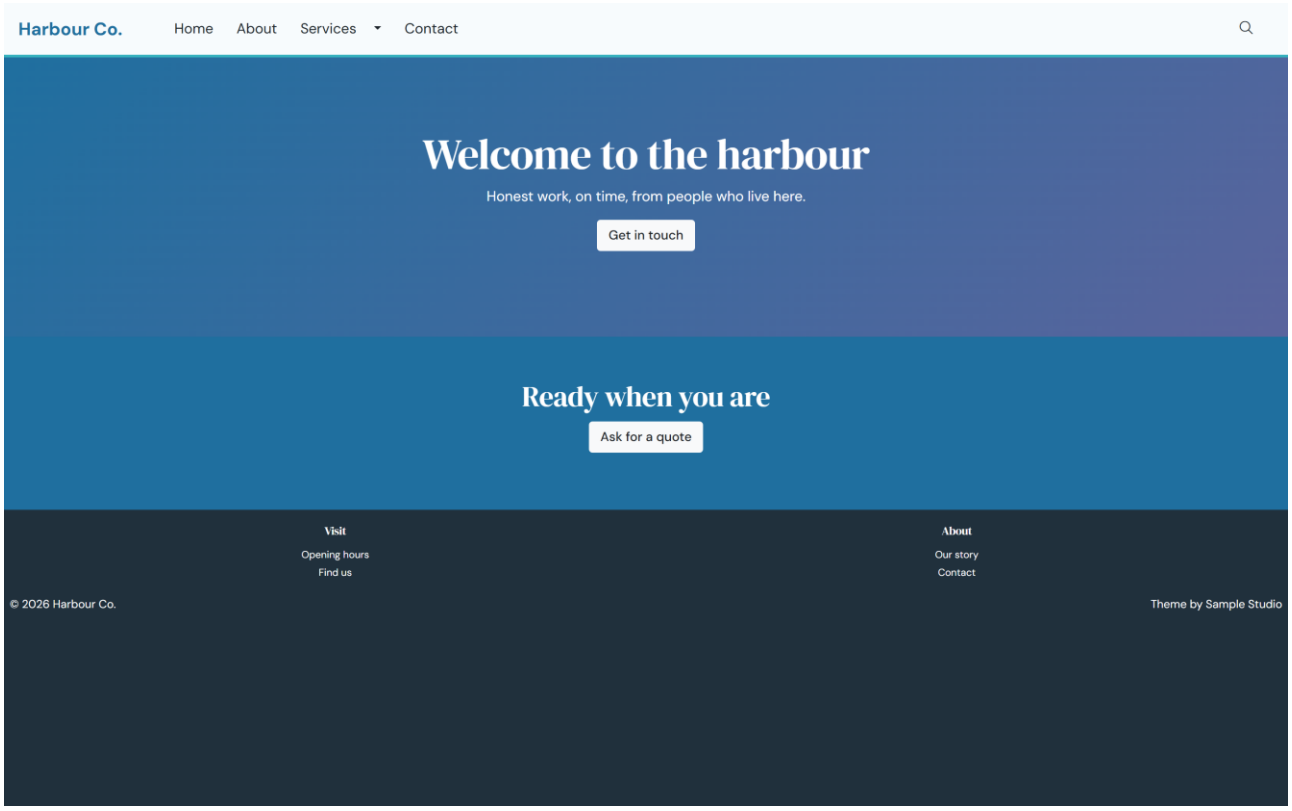
Address is where the page asks to be on a site, such as `about-us`. Leave it empty and the page's name is made into one. If a site already has a page at that address, it gets your page at another one, such as `about-us-2`. The Package page points out two of your pages asking for the same address.

Description is what search engines show under the page's title.

Hides the site's header and footer works as it does on a template: the site shows no header or footer on this page.

Preview it

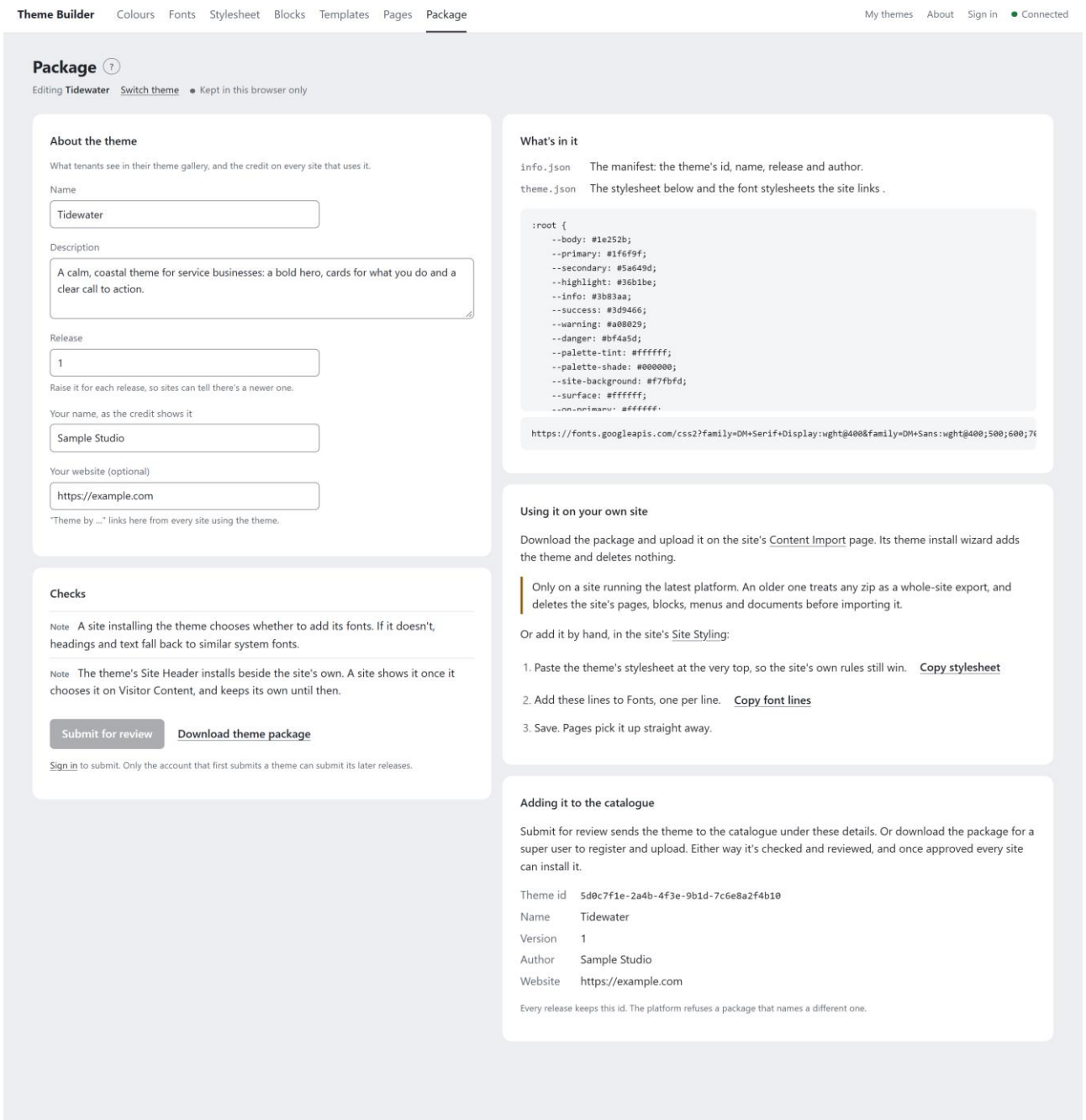
Click the eye above the designer to see the page as a site using your theme shows it, with your header, footer, colours, fonts and stylesheet.



The About us page's preview

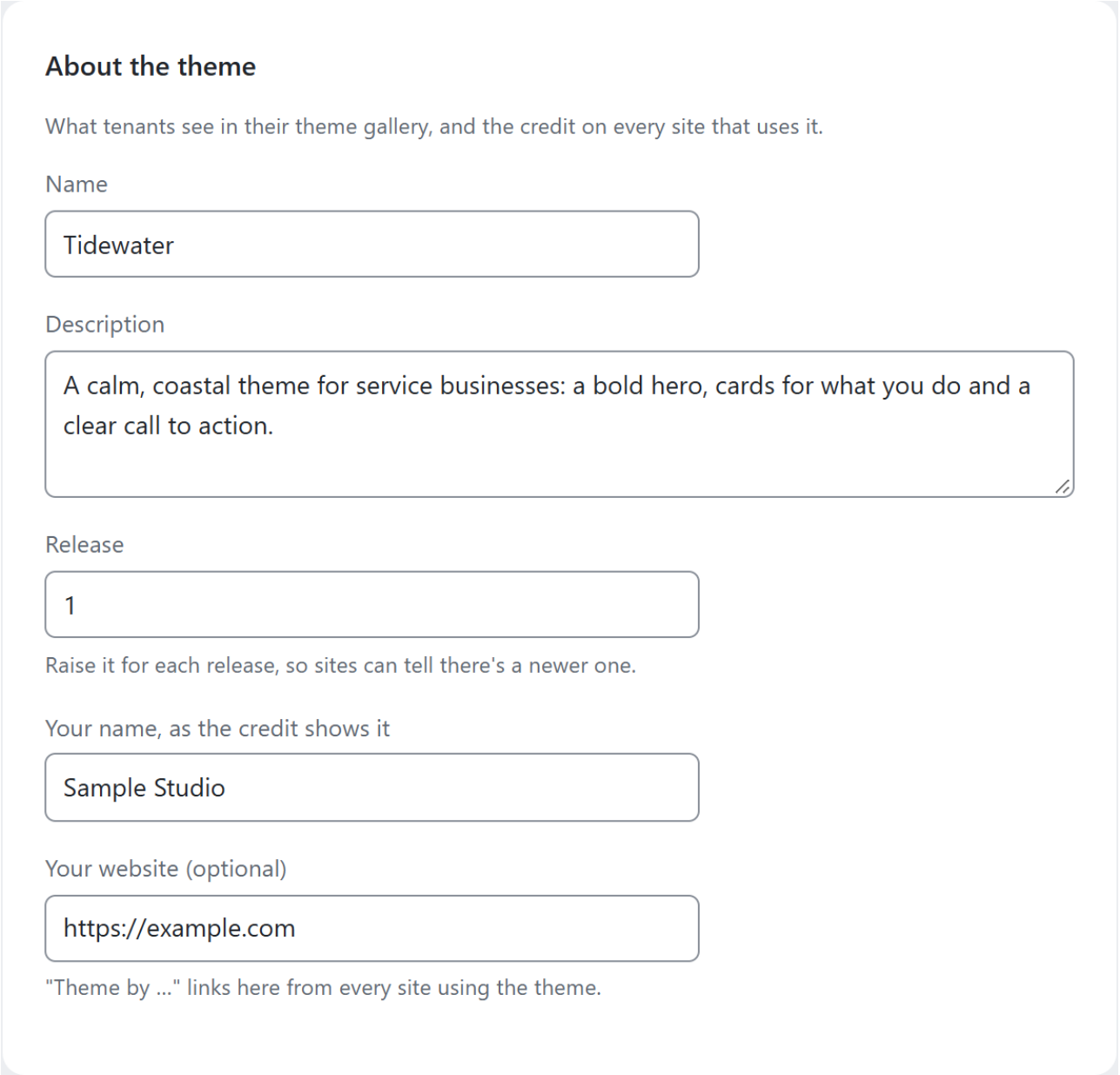
Package

Package turns your theme into the package chx4-Web installs: you name and credit the theme, check it, and submit it for review, or download it.



The Package page

Name and credit the theme

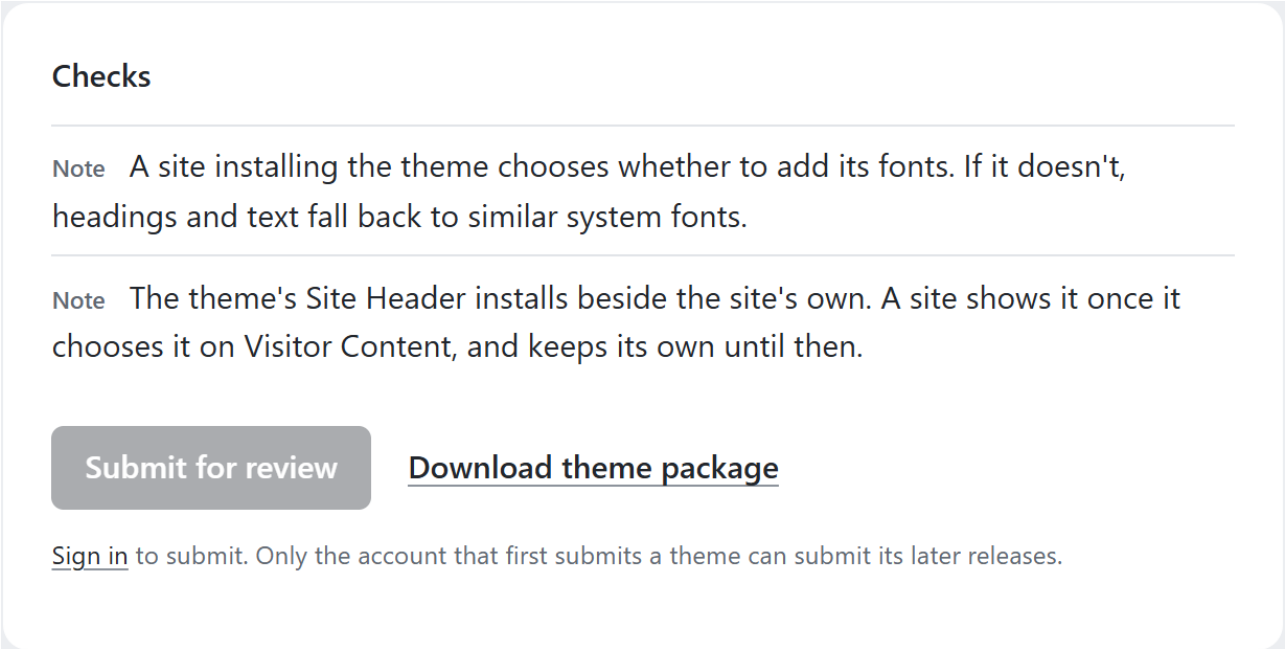


About the theme

Under **About the theme**:

- **Name** and **Description** are what sites read in their theme gallery.
- **Release** starts at 1. Raise it each time you submit a new release, so sites using the theme can tell there's a newer one.
- **Your name, as the credit shows it**: every site using the theme says "Theme by" and this name.
- **Your website (optional)**: the credit links here. Use a full address starting `https://`.

Check it



Checks

Checks looks over the theme the way chx4-Web will when it's submitted. Each check says what it found, marked by how much it matters:

- **Fix first**: the theme can't be packaged until this is fixed.
- **Will be refused**: the package can be made, but chx4-Web will refuse it.
- **Note**: worth knowing, such as a block whose text is hard to read, but nothing stops the theme.

When there's nothing to report it says **Ready to package**.

What reviewers look for

A reviewer approves a theme on three things. They don't judge how it looks: taste differs, and each site chooses a theme it likes.

- **It's accessible.** Text is readable on its background (every check on **Colours** passes, and the readability line on every block with colours of its own), every image has a description for its alt text, and everything can be reached and used from a keyboard, with focus visible.
- **It works at every screen size.** Every block, template and page works from a phone to a wide screen: nothing cut off, overlapping or scrolling sideways.
- **It holds nothing copyrighted.** Every image, every word of placeholder text and every font is yours to share with every site that installs the theme.

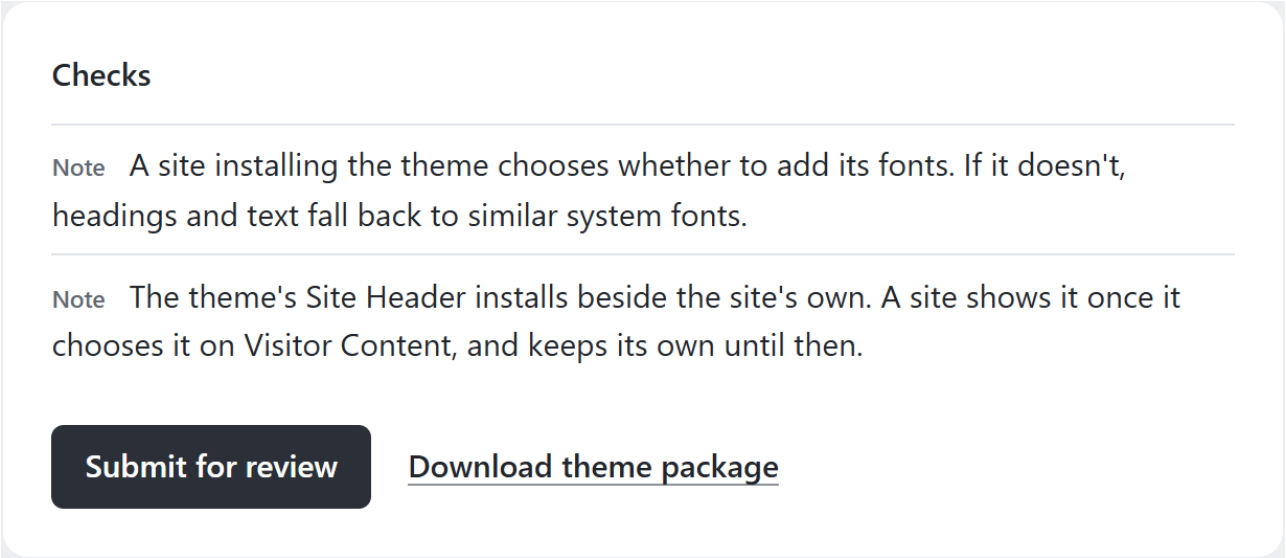
Before you submit, go through it once more:

1. Every check on **Colours** passes, and **Checks** here has nothing marked **Fix first**.
2. Every image has a description.
3. Each template and page reads and works at a phone's width as well as on a wide screen: click the eye above the designer, then the phone button beside it.
4. Your Site Header opens and closes its menu at a phone's width: on **Blocks**, click **Phone** under **As a site shows it**.
5. Tabbing through a preview with the keyboard shows where you are at every step.

6. Every image and every word is your own, or one you may share, and no placeholder text is someone else's.

Submit it for review

1. Sign in. A theme belongs to the account that first submits it, and only that account can submit its later releases.
2. Click **Submit for review**.



Signed in, ready to submit

chx4-Web checks the package and holds it for review. Once a reviewer approves it, every site can install it from its theme gallery.

To release a change to a theme that's already approved, raise **Release** and submit again. Sites keep the approved release until the new one is approved, then can update to it.

Download it

Download theme package saves the theme as a zip file. It's the same package **Submit for review** sends. Use it to keep a copy, or to try the theme on a site of your own.

Use it on your own site

To use the theme on one site without submitting it, download the package, then on that site's admin open **Content** › **Import Content** and upload it. The site recognises a theme package and opens its theme install wizard, which adds the theme and deletes nothing.

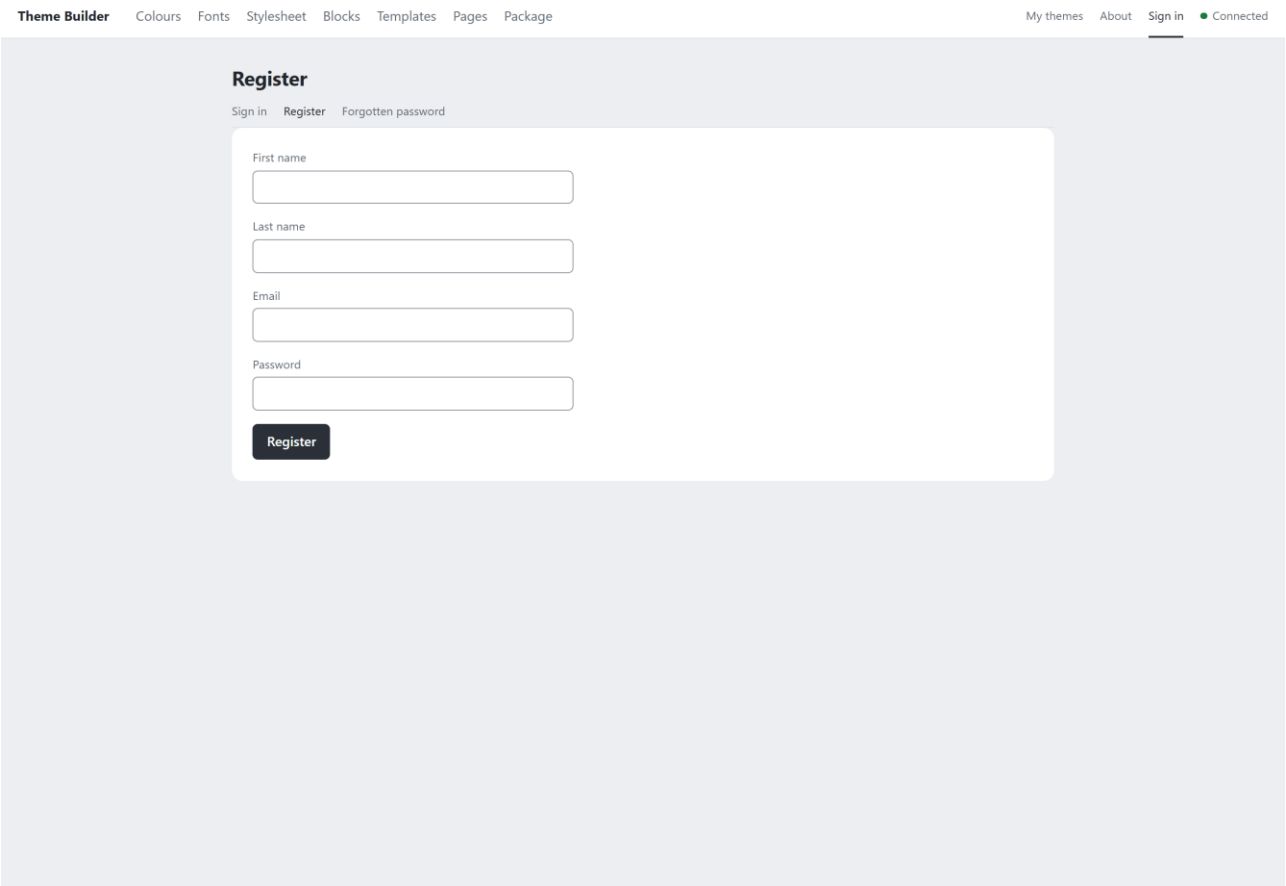
> **Note:** This only works on a site running the latest chx4-Web. On an older one, the import page takes any zip as an export of a whole site, and deletes all the site's content before adding what's in the zip.

You can also add just the styling by hand, under **Using it on your own site**: copy the stylesheet into the very top of the site's stylesheet in **Site Styling**, and the font lines into its fonts.

Your account

With an account your themes are saved as you work, and you can open them from any browser you sign in on. You need one to submit a theme. **Sign in**, at the right of the menu, is where you sign in, register and look after your account.

Register



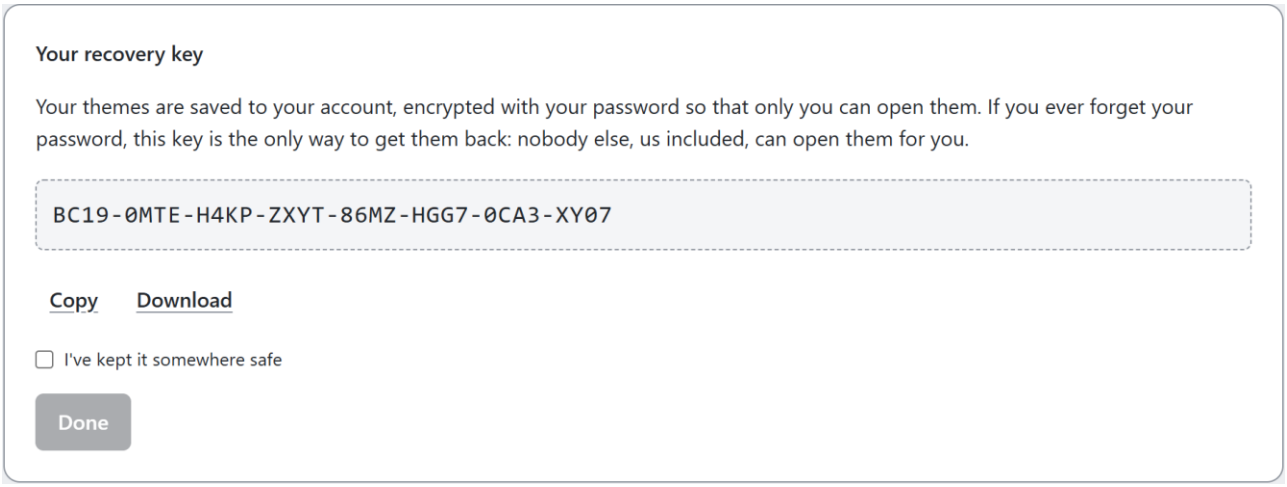
Register

1. Click **Sign in**, then **Register**.
2. Fill in your **First name**, **Last name**, **Email** and a **Password**.
3. Click **Register**.

The themes already in this browser go into your account.

Keep your recovery key

The first time your themes are saved to your account, Theme Builder shows a **recovery key**.

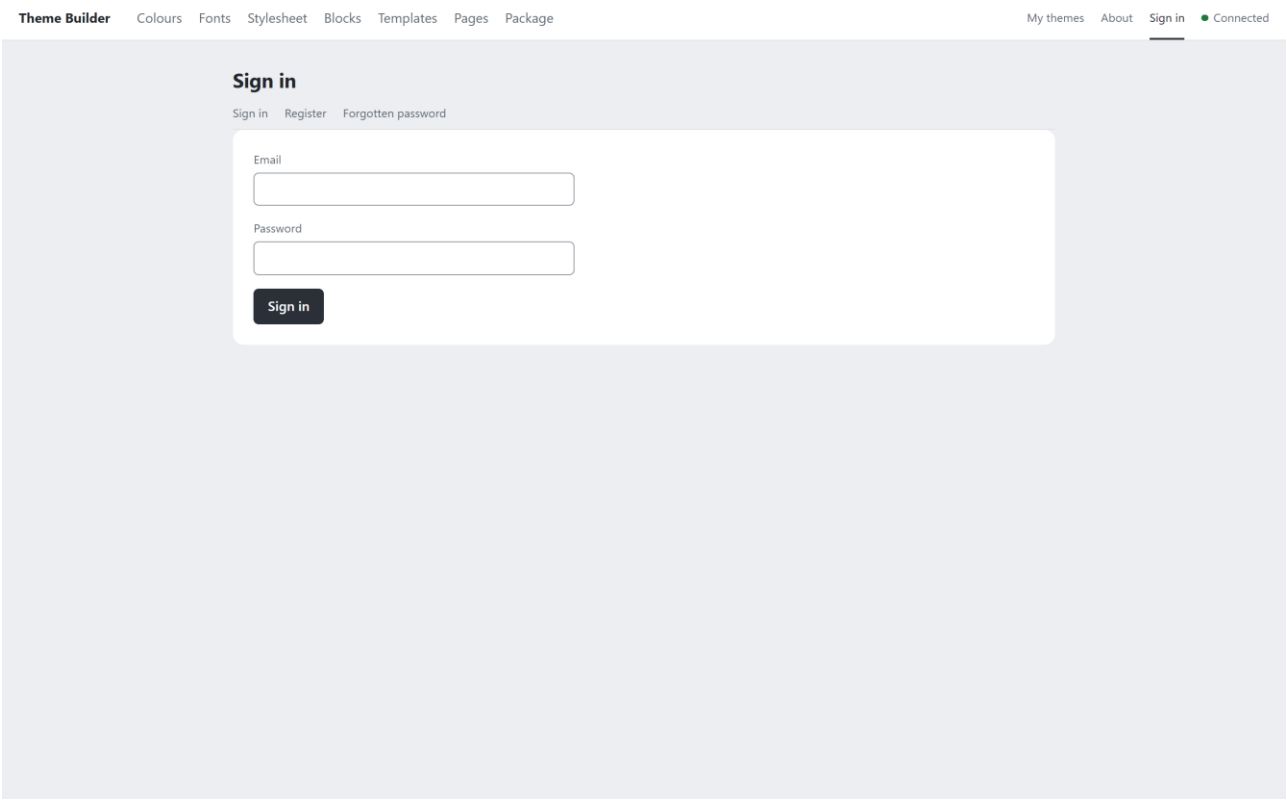


Your recovery key

Your themes are encrypted with your password, so that only you can open them: nobody else, not even chx4-Web's own staff, can read them. That also means nobody can get them back for you. If you forget your password, the recovery key is the only way back into them.

1. Click **Copy** or **Download**, and keep the key somewhere safe, such as a password manager.
2. Tick **I've kept it somewhere safe**, and click **Done**.

Sign in



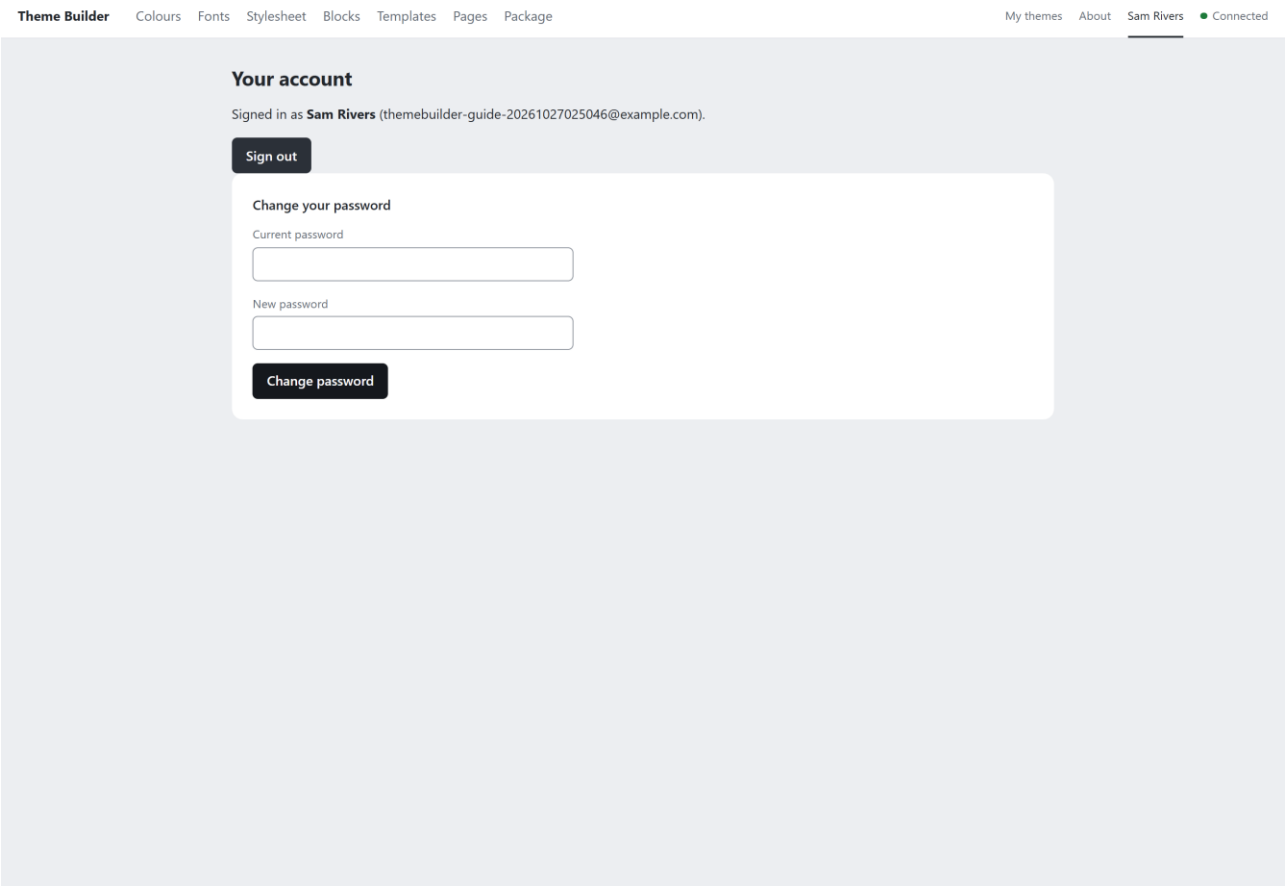
Sign in

Click **Sign in**, enter your **Email** and **Password**, and click **Sign in**. Your saved themes are merged with any in this browser: where both have the same theme, the one changed last is kept.

If you're signed in but your themes aren't open in this browser, Theme Builder asks for your password again under **Open your saved themes**.

Signed in

Once you're signed in, the menu shows your name where **Sign in** was. Click it to see your account.



Your account, signed in

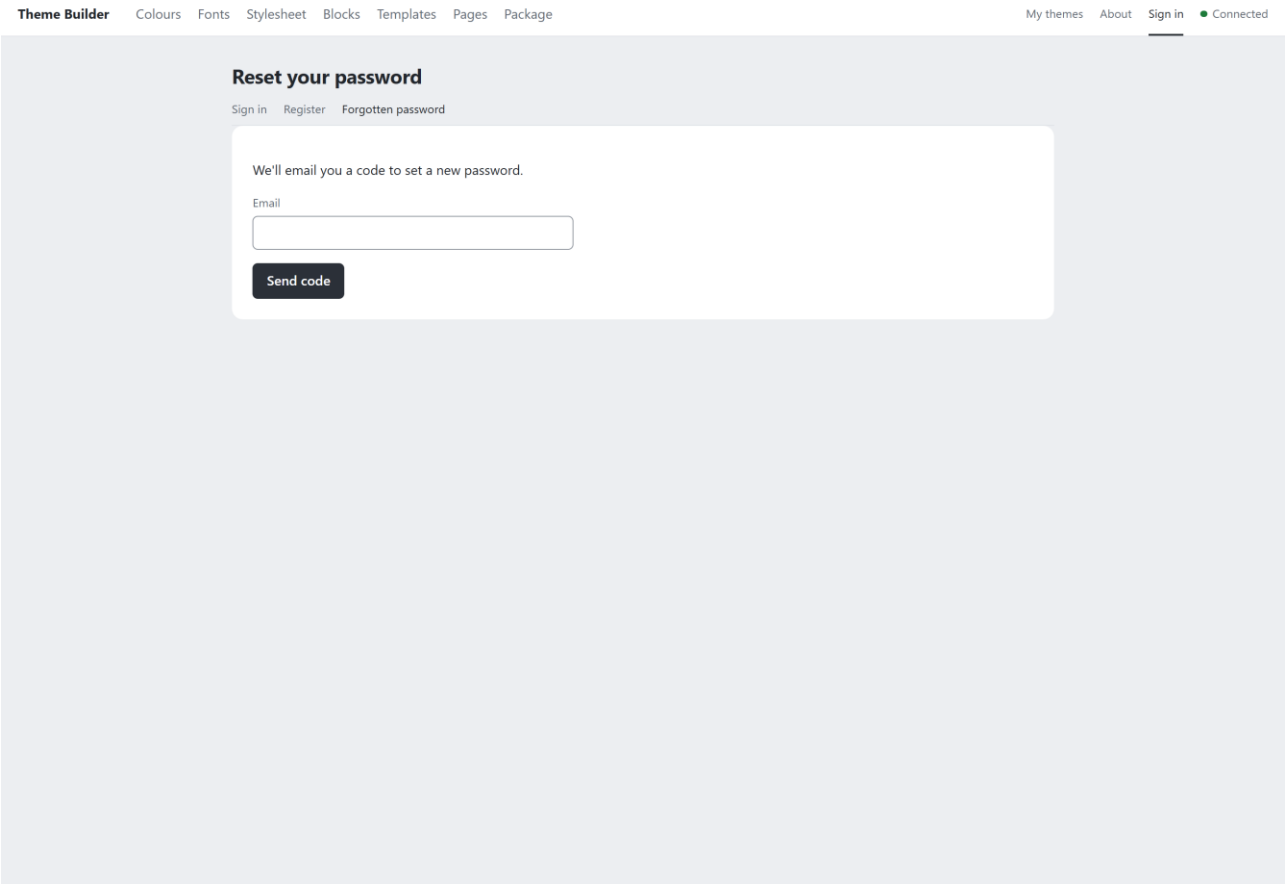
Sign out

Click your name in the menu, then **Sign out**. Theme Builder saves one last time, then clears your themes from the browser, so the next person to use it doesn't see them.

Change your password

Signed in, under **Change your password**, enter your **Current password** and a **New password**, and click **Change password**. Your themes stay open.

Forgotten your password



Forgotten password

1. Click **Sign in**, then **Forgotten password**.
2. Enter your **Email** and click **Send code**.
3. Enter the **Code** from the email and a **New password**, and click **Set password**.

You're signed in, and Theme Builder asks for your recovery key under **Get your saved themes back**. Enter it and click **Unlock my themes**.

If you've lost the key, nobody can open your old saved themes. **Start afresh** begins a new saved copy with the themes in this browser.