



CropWatch

DESIGN SYSTEM

Style guide

Colours, type, spacing and component rules for designing CropWatch screens in dark and light mode. Every value in this document is read from the `@cropwatchdevelopment/cwui` token files at build time.

LIBRARY VERSION

v0.1.115

GENERATED

23 September 2026

LIVE COMPONENTS

[cwui demo site](#) · [/demo](#)

Before you design your first screen

CropWatch is a sensor-monitoring platform for farms and greenhouses. Users check it on desktops in an office and on phones in the field, in daylight and at night, so every screen ships in a dark theme (the default) and a light theme. The UI library CWUI implements both from one set of design tokens.

How the system is organised

- 1. **Palette tokens** are raw colours such as `--cw-primary-500`. They never change between themes.
- 2. **Semantic tokens** describe a job, such as `--cw-text-muted` or `--cw-tone-danger-text`. Each theme maps them to a different palette value.
- 3. **Component tokens** such as `--cw-control-h-md` or `--cw-popover-bg` hold the shared sizes and surfaces that keep components consistent.

Design with semantic tokens. If a mock-up uses a palette colour directly, it will look right in one theme and wrong in the other.

Your first week

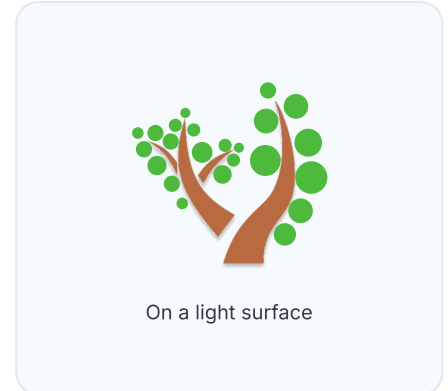
- Open the demo site and click through every component in both themes (moon/sun button, top right).
- Set up two colour libraries in your design tool, *CW Dark* and *CW Light*, using the semantic names on pages 5 to 8. Name styles after the token, e.g. `text/muted`.
- Install **Inter** and **JetBrains Mono** (page 10).
- Build frames at 390, 768 and 1440 px wide (page 11).
- Reuse an existing component before drawing a new one. The component list is on the demo home page.

Rules that apply to every screen

Both themes	Every screen is designed and reviewed in dark and light before hand-off.
Tokens, not hex	Hand-off notes name tokens (<code>--cw-bg-surface</code>), not colours (<code>#2d3243</code>).
Contrast	Body text 7:1 or better (AAA). Large text and icons 4.5:1 or better. Borders of inputs and meaningful graphics 3:1 or better.
Colour is never alone	Status also needs a label, icon or shape. About 1 in 12 men has a colour-vision deficiency.
Missing data	Show an em dash placeholder "—" or the no-data state. Never show 0 for a reading that did not arrive.
Minimum sizes	Text 11 px (0.6875rem) or larger. Touch targets 24 × 24 px minimum; 44 × 44 px for primary actions on phones.

Logo and brand colours

The mark is a bronze tree with a canopy of green leaves. The CropWatch green is used for the application header in light mode and as the company colour in print. The teal accent is the interactive colour inside the product.



- Keep clear space around the mark of at least a quarter of its width on every side.
- The side nav shows the mark at 24 px, and at 20 px in the collapsed icon rail. Do not use it smaller than 20 px.
- Do not recolour, outline, stretch or rotate the mark, and do not place it on photographs.
- Write the name as **CropWatch**: one word, capital C and W.



CropWatch green

#006045 · --cw-brand-green

Light-mode header, print, company materials



Accent teal

#00D4AA · --cw-primary-500

Interactive accent in dark mode



Leaf green

#4EBA3D

Logo leaves only



Bronze

#B86B40

Logo tree only

Palette ramps

Each ramp runs from a light tint (50) to a dark shade (900). Palette tokens are the same in both themes. Designers pick semantic tokens (next pages); the palette is listed so you can read hand-off specs and spot a value that does not belong.

Gray (neutrals) --cw-gray-*

50	100	200	300	400	500	600	700	800	850	900	950
#f8f9fc	#f1f5f9	#e2e8f0	#cbd5e1	#94a3b8	#64748b	#475569	#334155	#1e293b	#172033	#0f172a	#020618

Primary (teal) --cw-primary-*

50	100	200	300	400	500	600	700	800	900
#e6ffa	#b3f5e6	#80ecd5	#4de3c4	#26dab6	#00d4aa	#00b894	#00997a	#007a62	#05433a

Info (sky) --cw-info-*

50	100	200	300	400	500	600	700	800	900
#f0f9ff	#e0f2fe	#bae6fd	#7dd3fc	#38bdf8	#0ea5e9	#0284c7	#0369a1	#075985	#0c4a6e

Success (emerald) --cw-success-*

50	100	200	300	400	500	600	700	800	900
#ecfdf5	#d1fae5	#a7f3d0	#6ee7b7	#34d399	#10b981	#059669	#047857	#065f46	#064e3b

Warning (amber) --cw-warning-*

50	100	200	300	400	500	600	700	800	900
#ffffeb	#fef3c7	#fde68a	#fcd34d	#fbbf24	#f59e0b	#dc7706	#b45309	#92400e	#78350f

Danger (red) --cw-danger-*

50	100	200	300	400	500	600	700	800	900
#fef2f2	#fee2e2	#fecaca	#fca5a5	#f87171	#ef4444	#dc2626	#b91c1c	#991b1b	#7f1d1d

Surfaces, text and borders

Screens are built in layers: the page background, then cards and panels, then pop-ups and menus. Ratios below are measured against --cw-bg-surface in each theme.

DARK

BACKGROUNDS

	--cw-bg-base	#172335
	--cw-bg-surface	#2d3243
	--cw-bg-surface-elevated	#2b3c54
	--cw-bg-elevated	#324661
	--cw-bg-muted	#31455e
	--cw-header-bg	#1a1d2a
	--cw-scrim	#020618 · 60%

TEXT

	--cw-text-primary	#f4f8fc	11.9:1
	--cw-text-secondary	#eaf1f8	11.2:1
	--cw-text-muted	#c7d3e0	8.4:1
	--cw-text-disabled	#92a3b7	4.9:1
	--cw-header-fg	#ffffff	16.8:1

BORDERS

	--cw-border-muted	#516883	
	--cw-border-default	#647c97	
	--cw-border-strong	#839ab4	4.4:1
	--cw-control-border	#839ab4	4.4:1

LIGHT

BACKGROUNDS

	--cw-bg-base	#d6e0ea
	--cw-bg-surface	#f7fafc
	--cw-bg-surface-elevated	#fbfdff
	--cw-bg-elevated	#e8eff5
	--cw-bg-muted	#dee7f0
	--cw-header-bg	#006045
	--cw-scrim	#0f172a · 45%

TEXT

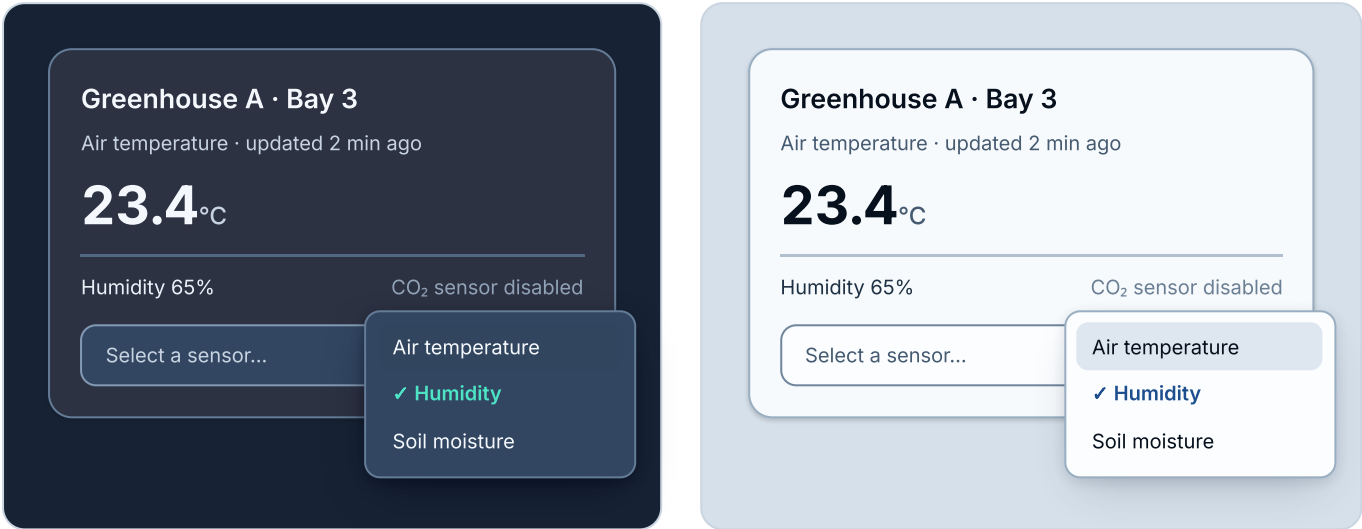
	--cw-text-primary	#07111d	18.1:1
	--cw-text-secondary	#1f3144	12.7:1
	--cw-text-muted	#465b72	6.7:1
	--cw-text-disabled	#6b7f94	3.9:1
	--cw-header-fg	#ffffff	7.6:1

BORDERS

	--cw-border-muted	#b0c0ce
	--cw-border-default	#99aec1
	--cw-border-strong	#70869d 3.6:1
	--cw-control-border	#70869d 3.6:1

How the layers stack

The same card drawn with tokens in both themes. Text on a card uses the primary, secondary, muted and disabled text tokens in that order of importance.



LAYER	TOKEN	USE IT FOR
Page	--cw-bg-base	The area behind all content.
Card / panel	--cw-bg-surface	Cards, tables, dialogs' content area, sidebars.
Inset / control	--cw-control-bg, --cw-bg-muted	Inputs, read-only fields, skeleton placeholders, selected rows.
Pop-up	--cw-popover-bg + --cw-elevation-popover	Dropdown lists, menus, date pickers, tooltips.
Modal	--cw-overlay-bg + --cw-elevation-modal + --cw-scrim	Dialogs and the offline notice. The scrim dims the page behind.

Tones

Six tones carry meaning across chips, badges, toasts, buttons and alerts. Each tone has three styles: **soft** (tinted background, tone text), **outline** (border and tone text) and **solid** (filled, used sparingly for counts and the most urgent states).

DARK

	SOFT	OUTLINE	SOLID
primary	primary 7.7:1	primary 7.9:1	primary 10.6:1
secondary	secondary 9.1:1	secondary 8.6:1	secondary 7.6:1
info	info 6.9:1	info 7.6:1	info 5.9:1
success	success 7.7:1	success 8.4:1	success 5.5:1
warning	warning 8.0:1	warning 8.8:1	warning 9.4:1
danger	danger 6.5:1	danger 6.7:1	danger 6.5:1

LIGHT

	SOFT	OUTLINE	SOLID
primary	primary 6.9:1	primary 8.3:1	primary 6.7:1
secondary	secondary 8.3:1	secondary 9.9:1	secondary 7.6:1
info	info 6.2:1	info 7.2:1	info 5.9:1
success	success 5.9:1	success 6.8:1	success 5.5:1
warning	warning 5.6:1	warning 6.8:1	warning 5.0:1
danger	danger 6.6:1	danger 7.9:1	danger 6.5:1

tone	meaning
primary	Brand emphasis, selected filters.
secondary	Neutral labels and metadata; loading chips.
info	Neutral information, tips, "new".
success	Healthy, online, saved.
warning	Needs attention soon: near a threshold, partial outage.
danger	Act now: alarm, offline, error, destructive action.

Device status, accent and focus

Sensor and gateway state uses one mapping everywhere: status dots, the coloured rail on sensor cards, location cards and chips. Always pair the colour with the status word.

DARK

● Online

--cw-status-online

#10b981 · 5.0:1 on surface

● Warning

--cw-status-warning

#fbbf24 · 7.6:1 on surface

● Alarm / error

--cw-status-alarm

#ef4444 · 3.4:1 on surface

● Offline

--cw-status-offline

#ef4444 · 3.4:1 on surface

● Loading

--cw-status-loading

#a855f7 · 3.2:1 on surface

LIGHT

● Online

--cw-status-online

#059669 · 3.6:1 on surface

● Warning

--cw-status-warning

#d97706 · 3.0:1 on surface

● Alarm / error

--cw-status-alarm

#dc2626 · 4.6:1 on surface

● Offline

--cw-status-offline

#dc2626 · 4.6:1 on surface

● Loading

--cw-status-loading

#7c3aed · 5.4:1 on surface

STATUS	WHEN	CHIP TONE
Online	Readings are arriving inside the expected interval.	success
Warning	A reading is near a threshold, or some sensors at a location are offline.	warning
Alarm / error	A threshold is breached or the sensor reports a fault.	danger
Offline	No reading within the device's timeout. Red, because a silent sensor in a greenhouse is an alert.	danger
Loading	State not known yet (first load).	secondary

Accent and focus

■ --cw-accent

#00d4aa

6.7:1

■ --cw-accent-text

#4de3c4

7.9:1

■ --cw-focus-ring-color

#00d4aa

6.7:1

■ --cw-option-hover-bg

#31455e

■ --cw-option-selected-text

#4de3c4

7.9:1

■ --cw-accent

#2c6cb7

5.1:1

■ --cw-accent-text

#1d4f8e

7.8:1

■ --cw-focus-ring-color

#2c6cb7

5.1:1

■ --cw-option-hover-bg

#dee7f0

■ --cw-option-selected-text

#1d4f8e

7.8:1

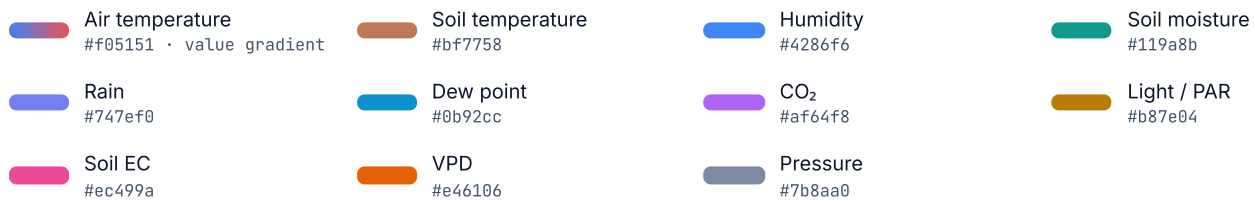
The accent is teal in dark mode and blue in light mode. Keyboard focus is always a solid 2 px ring in --cw-focus-ring-color with a 2 px gap. Draw it on every interactive element in your state sheets.

Chart colours

Charts use two colour sets. The **categorical palette** colours series that have no fixed meaning, in this order. **Metric colours** are fixed per measurement so temperature is red-toned and humidity is blue on every chart in the product.



Metric colours



- Never use status colours (success, danger) for categories. A red series reads as "alarm".
- Temperature lines use a value gradient: cold values blue, hot values red.
- Legends sit below the plot. Each legend item toggles its series; the last visible series cannot be hidden.
- Axis and tick labels are 11 px with tabular (fixed-width) numerals so values line up.
- Every chart needs a loading state and a "No data available" state.

Typography

Inter is the interface typeface. **JetBrains Mono** is used for device IDs (DevEUI), code and event logs. Both are free on Google Fonts.

--cw-text-3xl · 30px · bold	Sensor readings 23.4°C
--cw-text-2xl · 24px · bold	Page title: Greenhouse overview
--cw-text-xl · 20px · semibold	Dialog title: Edit alert rule
--cw-text-lg · 18px · semibold	Card title: Bay 3 temperature
--cw-text-base · 16px · regular	Long-form body text and descriptions
--cw-text-sm · 14px · regular	Default UI text, table cells, form labels (medium)
--cw-text-xs · 12px · regular	Hints, captions, timestamps, table headers
--cw-font-mono · IDs, code	DevEUI b0:62:2f:f0:df:a0:98:25

Where each size is used

ROLE	SIZE · WEIGHT	COLOUR TOKEN
Page title	2xl · bold	--cw-text-primary
Card title	base or lg · semibold	--cw-text-primary
Body, table cells	sm · regular	--cw-text-primary / -secondary
Form label	sm · medium, sentence case	--cw-text-secondary
Hint, caption, table header	xs · regular / semibold	--cw-text-muted
Sensor reading (hero)	3xl · bold, tabular numerals	--cw-text-primary
Unit after a reading	sm · medium	--cw-text-muted

Writing values

- 23.4 kPa: a non-breaking space between value and unit.
- 23.4°C, 65%: no space before °C, °F and %.
- – for a missing value; never 0 or N/A.
- Use the user's locale for dates and decimals (the app supports English and Japanese).

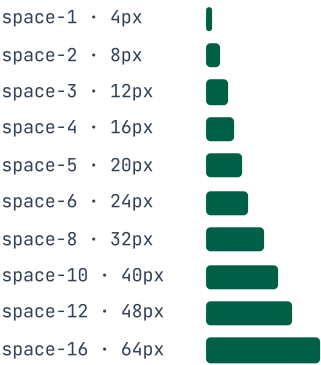
Writing labels

- Sentence case everywhere: "Last seen", not "Last Seen".
- Buttons are verbs: "Save changes", "Add device".
- Use the ellipsis character "..." in placeholders, not three full stops.

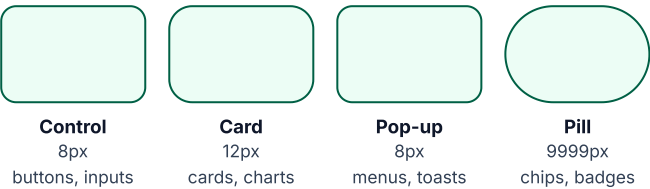
Spacing, radius, elevation and breakpoints

Spacing uses a 4 px base. Pick the nearest step; values between steps are not part of the system.

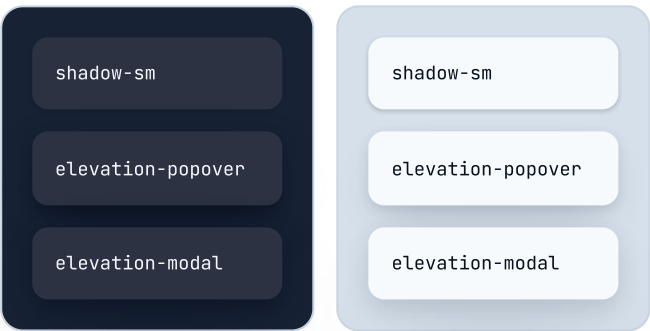
Spacing scale



Corner radius



Elevation



Breakpoints and frames

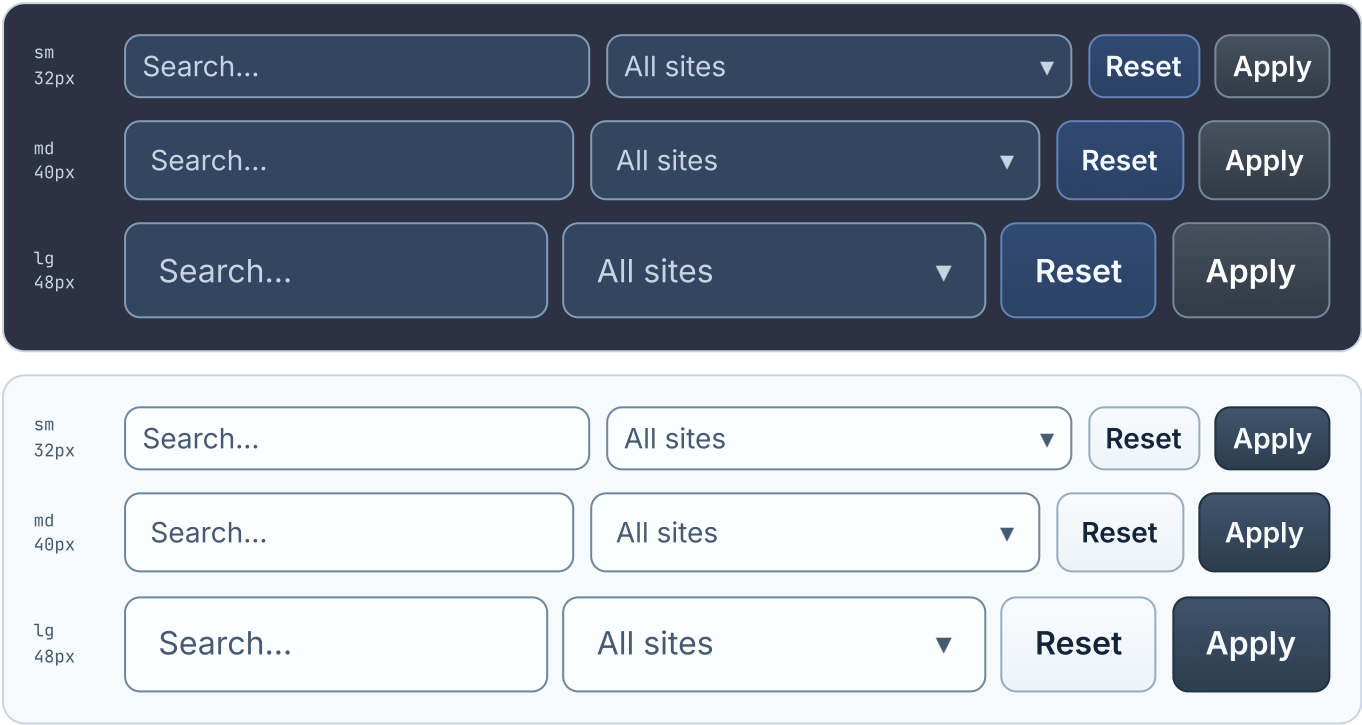
NAME	WIDTH	DESIGN FRAME	SIDE NAV
Phone	≤ 640 px	390 px	Hidden; opens over the page
Tablet	641–1024 px	768 px	Icon rail (mini)
Desktop	> 1024 px	1440 px	Open, 280 px wide

Stacking order

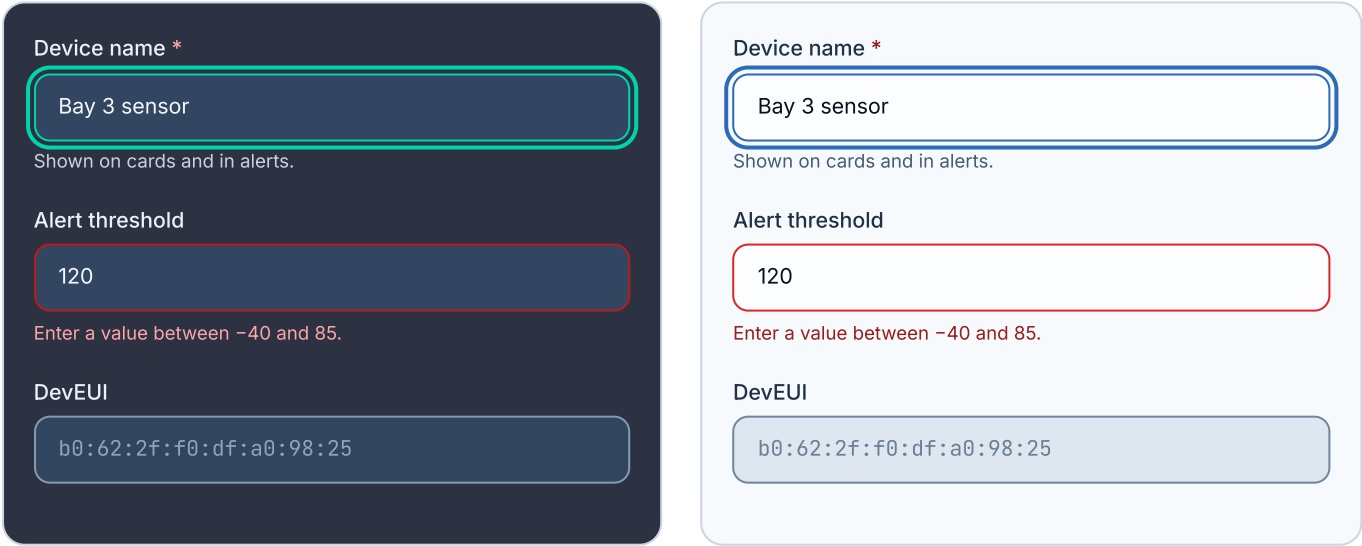
--cw-z-inline-overlay	no-data / loading over a card	10
--cw-z-dropdown	in-flow dropdowns	100
--cw-z-sticky	sticky headers	200
--cw-z-overlay	side-nav overlay	300
--cw-z-popover	menus, list pop-ups	350
--cw-z-modal	dialogs	400
--cw-z-toast	toasts	500
--cw-z-tooltip	tooltips	600

Controls and forms

Buttons, inputs, dropdowns and pickers share one height scale, so a toolbar built from mixed controls lines up. Use one size per row.



Form field anatomy



PART	SPEC
Label	Above the field, sm medium, --cw-text-secondary. Required fields add " *" in the danger text colour.
Field	Height from --cw-control-h-*, radius --cw-control-radius, 1 px --cw-control-border.
Hint / error	One line below, xs. The error replaces the hint and turns the border to --cw-tone-danger-border.
States to draw	Default, hover, focus, filled, error, disabled, read-only. Pop-ups also need empty and loading.

Hand-off checklist

Go through this list before a design goes to development. Each item maps to a rule the component library already enforces, so a design that fails one will be changed in the build.

Every screen

- ☐ Drawn in dark and light.
- ☐ Drawn at phone and desktop widths.
- ☐ Colours named by semantic token.
- ☐ Text contrast checked: 7:1 body, 4.5:1 large text and icons.
- ☐ No text smaller than 11 px.
- ☐ Every status shown with a word or icon as well as colour.
- ☐ Focus order and focus ring shown for interactive elements.

Every data view

- ☐ Loading state (skeleton, not a blank area).
- ☐ Empty state: "No data available" with a short reason.
- ☐ Error state with what happened and what to do next.
- ☐ Stale data: value dimmed plus "Last seen ... ago".
- ☐ Missing readings shown as "—".
- ☐ Numbers right-aligned in tables, tabular numerals.
- ☐ Units spaced per the typography page.

Where things live

Token source files	src/lib/styles/tokens.css, theme-dark.css, theme-light.css
Live components	CWUI demo site, /demo. Each page lists props and shows every state.
Metric colours	src/lib/utils/metricColors.ts
This PDF	Rebuilt from the token files with <code>npm run style-guide</code> . If a value here disagrees with the demo site, the demo site is correct and this file needs regenerating.