

## How Margin Collapse Works in CSS

**Margin collapse** occurs when the vertical margins of block-level elements meet and combine into a single margin, rather than adding together. This only happens in the *vertical* direction (top and bottom), not horizontally [\[1\]](#) [\[2\]](#) [\[3\]](#).

For example, if you have two stacked `<div>` elements, one with `margin-bottom: 30px` and the other with `margin-top: 20px`, only the larger margin (30px) will be rendered, not the sum [\[1\]](#) [\[4\]](#).

## How Padding Solves Margin Collapse

**Adding padding to the parent element** is one of the simplest and most reliable ways to prevent margin collapse. When some padding is present between the parent and child, the margins no longer "touch," which prevents them from collapsing together [\[5\]](#) [\[6\]](#) [\[7\]](#).

## How To Do It

Suppose you have this HTML structure:

```
<div class="parent">
  <div class="child"></div>
</div>
```

And this CSS:

```
.parent {
  /* No padding initially */
}

.child {
  margin-top: 20px;
}
```

With no padding or border, the child's `margin-top` can collapse with the parent's margin or even with other elements.

### To prevent margin collapse:

- Add padding (even as small as 1px) to the parent:

```
.parent {
  padding-top: 1px; /* or padding-bottom, as needed */
}
```

Now, the parent's padding acts as a buffer, so the child's `margin-top` won't collapse into the parent's margin — you will see the full margin and padding rendered together<sup>[5] [6] [7]</sup>.

## Example

### Without Padding (margin collapse):

```
.parent { background: #eee; }  
.child { margin-top: 30px; background: #cff; }
```

The top margin of the `.child` may collapse with the parent's margin, leading to unexpected spacing.

### With Padding (no collapse):

```
.parent { padding-top: 1px; background: #eee; }  
.child { margin-top: 30px; background: #cff; }
```

Now the padding stops the collapsing, and spacing comes from both the 1px padding and the 30px margin<sup>[6] [7]</sup>.

## Key Points

- **Add padding (as little as 1px) to the parent** in the direction where collapse occurs to stop vertical margin collapse with children<sup>[5] [6] [7]</sup>.
- Padding acts as a non-collapsible area between elements.
- Adding a border has the same effect as padding.
- Margin collapse only applies to vertical margins of block-level elements in normal flow.

**In summary:** Add padding to a parent element to break up vertical margin collapse, ensuring your spacing behaves as expected in CSS layouts<sup>[5] [6] [7]</sup>.

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1. [https://www.w3schools.com/css/css\\_margin\\_collapse.asp](https://www.w3schools.com/css/css_margin_collapse.asp)
2. [https://developer.mozilla.org/en-US/docs/Web/CSS/CSS\\_box\\_model/Mastering\\_margin\\_collapsing](https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_box_model/Mastering_margin_collapsing)
3. <https://www.freecodecamp.org/news/what-is-margin-collapse-and-how-to-avoid-it/>
4. <https://www.geeksforgeeks.org/css/css-margin-collapse/>
5. <https://www.joshwcomeau.com/css/rules-of-margin-collapse/>
6. <https://www.geeksforgeeks.org/css/how-to-disable-margin-collapsing-in-css/>
7. <https://dev.to/elijahtrillionz/mastering-css-margin-collapse-with-practical-examples-2phn>