

CSS3

BOX-SHADOW

The CSS3 **box-shadow** property allows you to apply one or more shadows to any box - including outer and inner box shadows.

An **outer box-shadow** casts a shadow as if the box were opaque. The shadow is drawn outside the border edge only.



An **inner box-shadow** casts a shadow as if everything outside the box were opaque. The inner shadow is drawn inside the padding edge only.



The box-shadow should **follow any curved corners** that have been defined with border-radius.



box-shadow

syntax

The **box-shadow** property takes four <length> values, one color value and an optional “inset” keyword.

```
/* box-shadow example */  
p  
{  
    box-shadow: 10px 10px 5px 5px #000 inset;  
}
```


The <length> values can include **relative** and **absolute** values.

```
/* different length values */  
p { box-shadow: 1em 1em 1em 1em #000; }  
p { box-shadow: 2ex 2ex 2ex 2ex #000; }  
p { box-shadow: 3px 3px 3px 3px #000; }  
p { box-shadow: 4in 4in 4in 4in #000; }  
p { box-shadow: 5cm 5cm 5cm 5cm #000; }  
p { box-shadow: 6mm 6mm 6mm 6mm #000; }  
p { box-shadow: 7pt 7pt 7pt 7pt #000; }  
p { box-shadow: 8pc 8pc 8pc 8pc #000; }
```

Horizontal offset

The **horizontal offset** of the shadow is defined first.

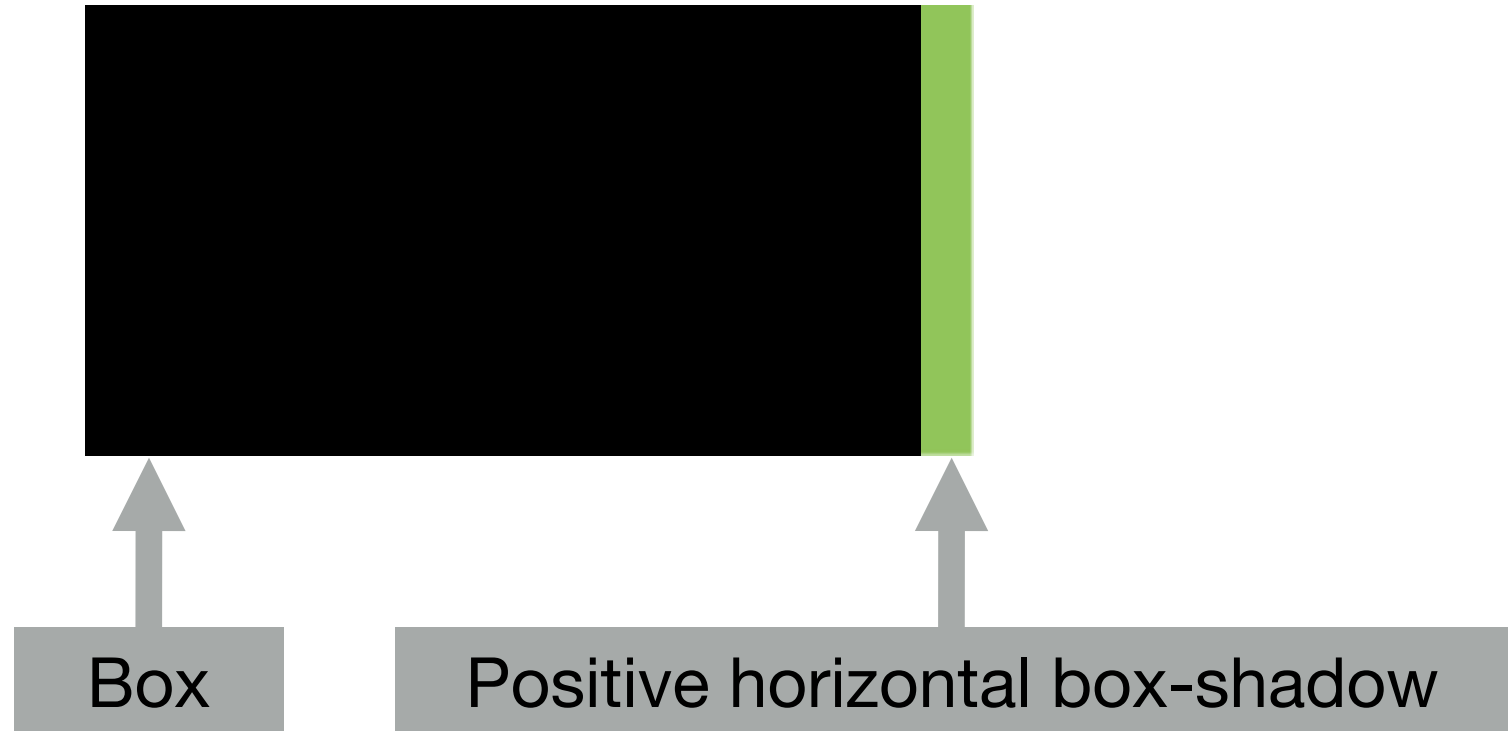
```
/* horizontal offset */  
p  
{  
    box-shadow: 10px 10px 5px 5px #000 inset;  
}
```



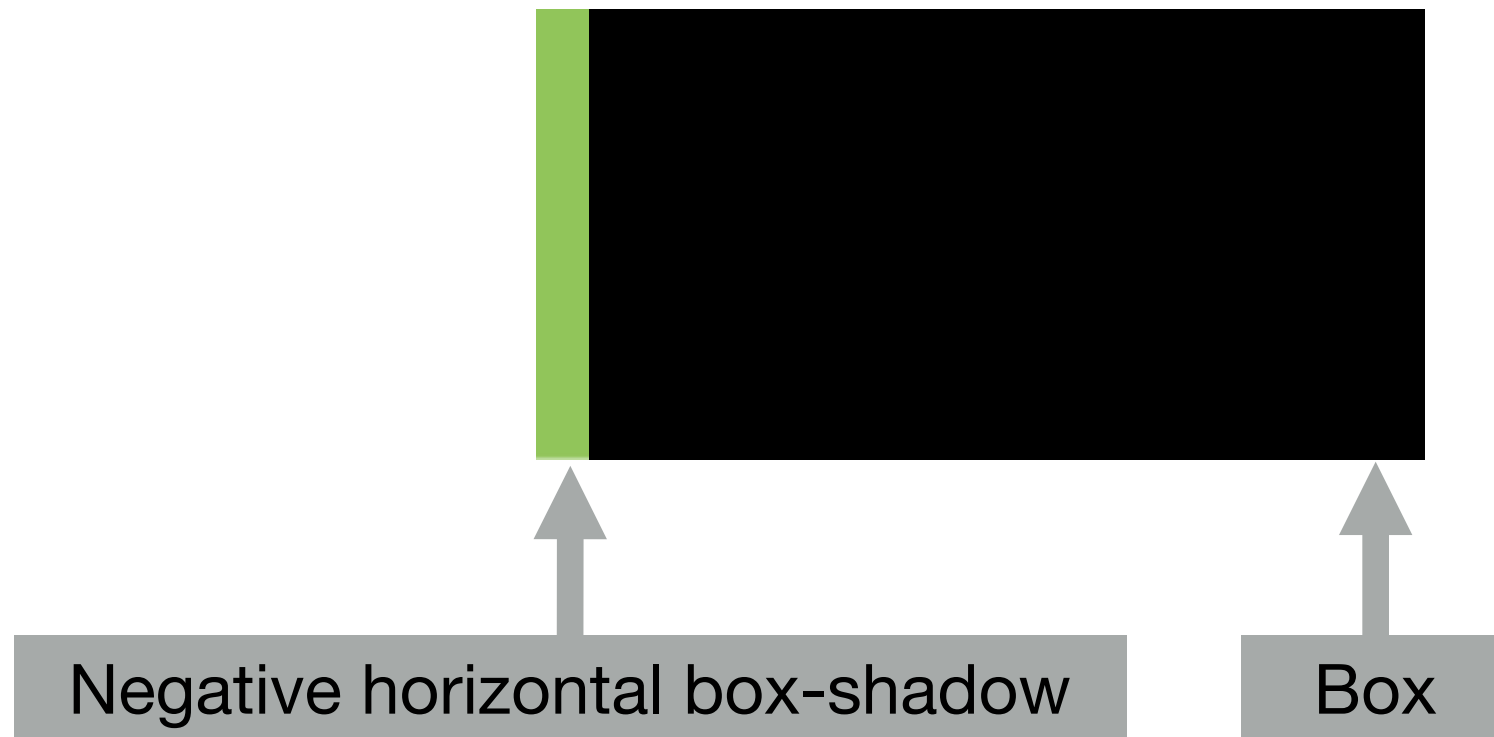
Horizontal offset

The diagram consists of a light gray rectangular box containing the text 'Horizontal offset'. A gray arrow points vertically upwards from the top center of this box to the '10px' value in the 'box-shadow' property of the CSS code above.

A **positive value** will place the shadow on the right of the box.



A **negative value** will place the shadow on the left of the box.



Vertical offset

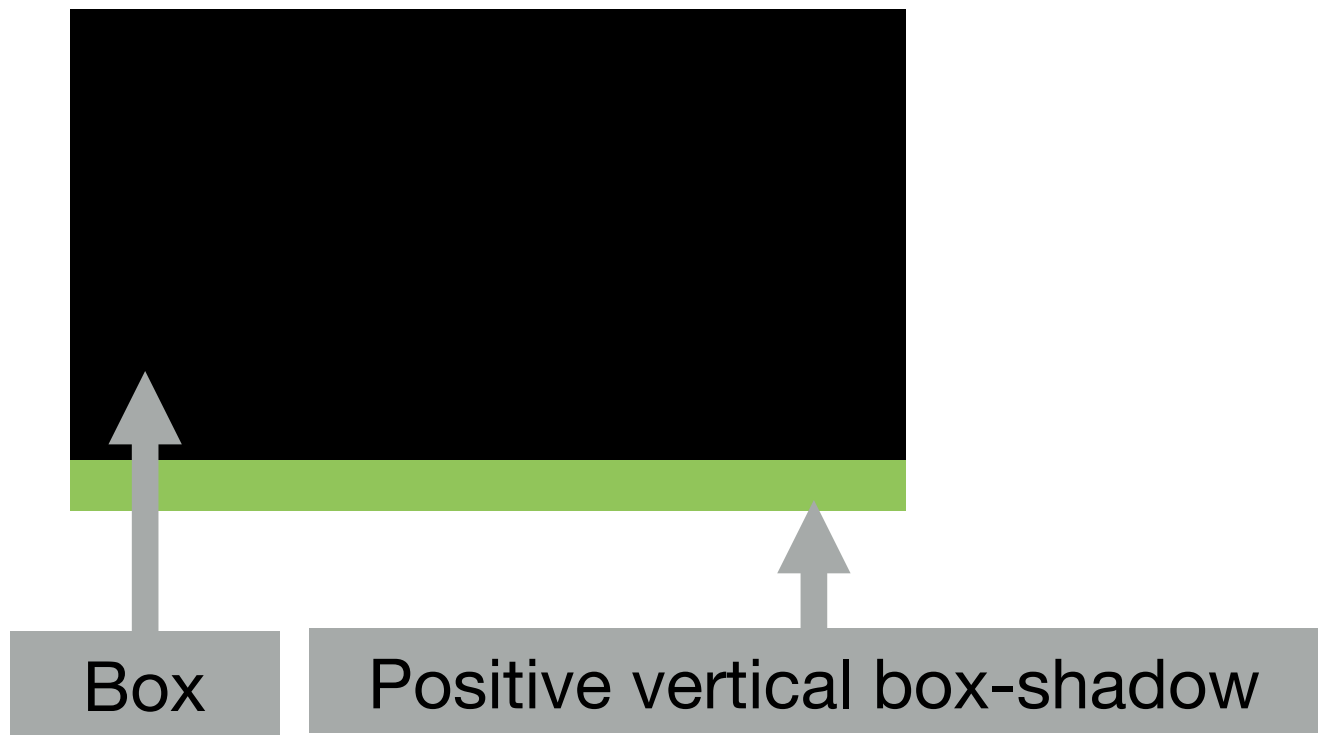
The **vertical offset** of the shadow is defined second.

```
/* vertical offset */  
p  
{  
    box-shadow: 10px 10px 5px 5px #000 inset;  
}
```

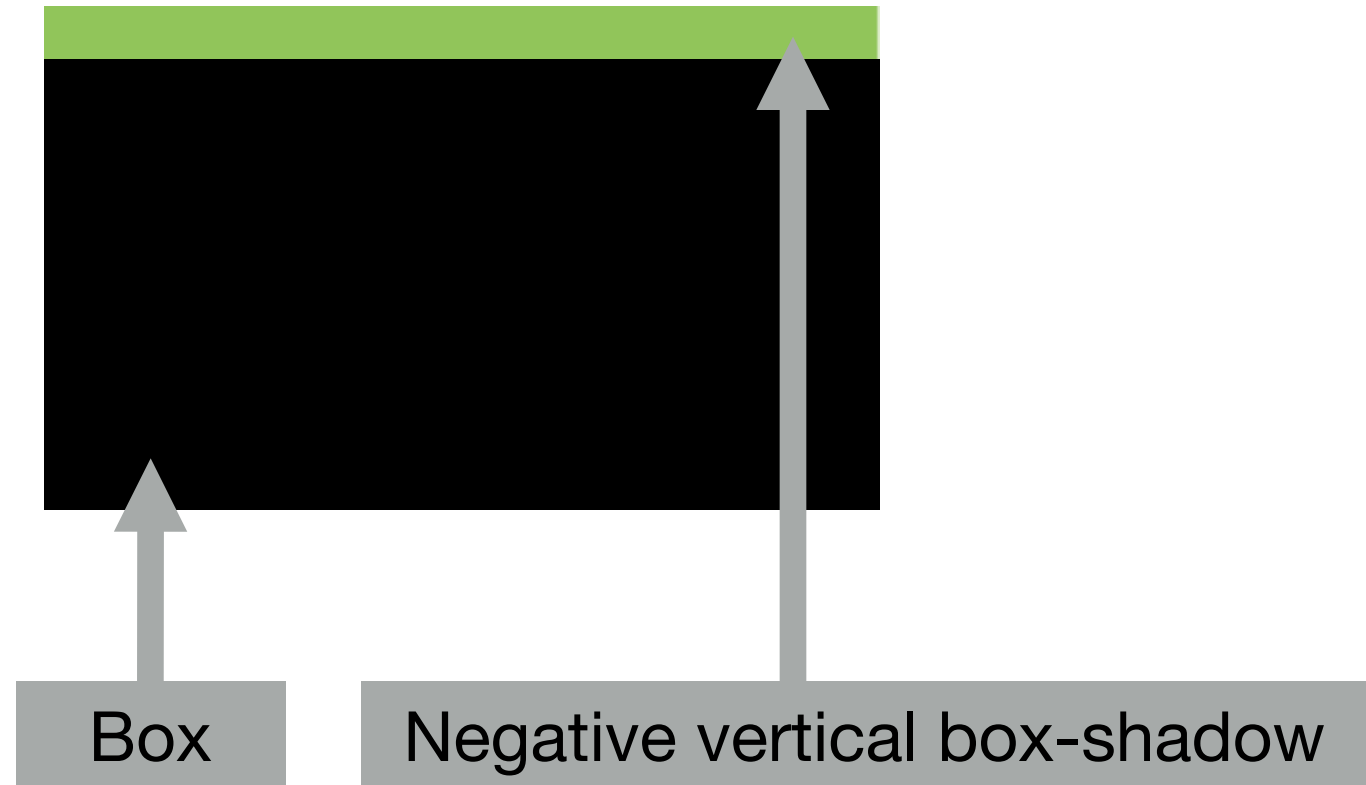


Vertical offset

A **positive value** will place the shadow below of the box.



A **negative value** will place the shadow above the box.



Blur radius

The **blur radius** of the shadow is defined third.

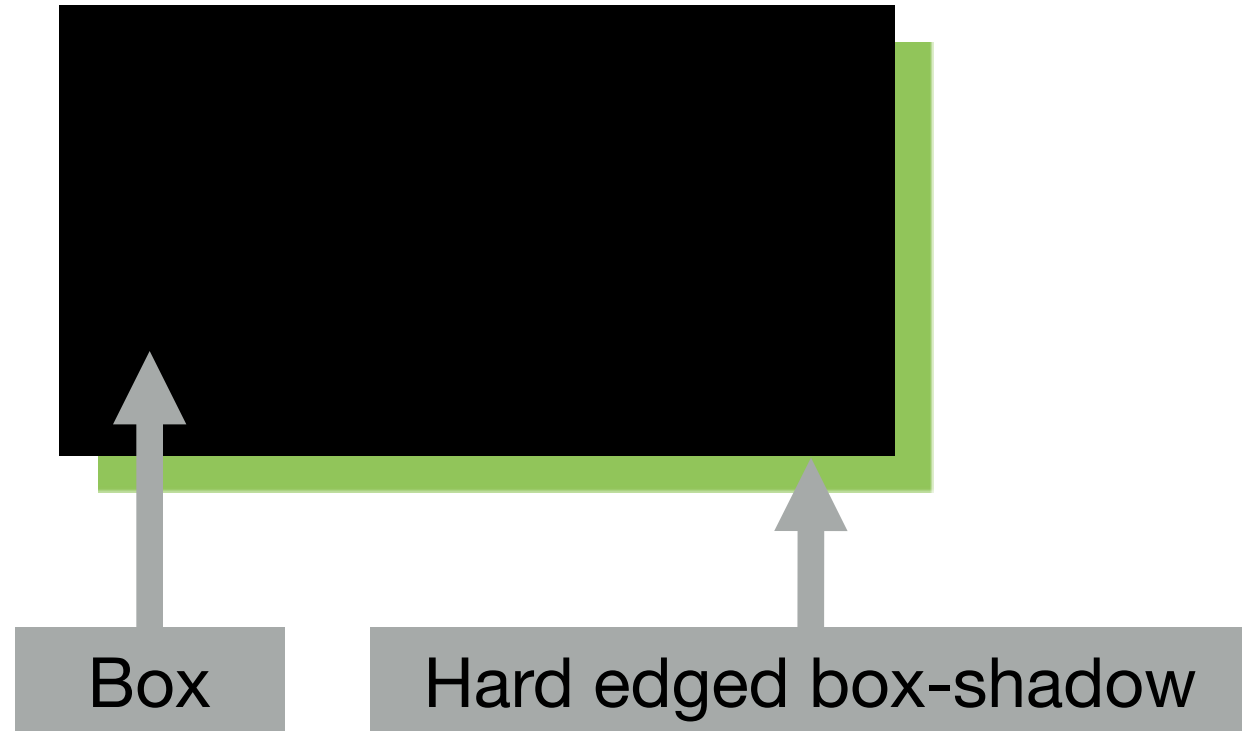
```
/* blur radius */  
p  
{  
    box-shadow: 10px 10px 5px 5px #000 inset;  
}
```



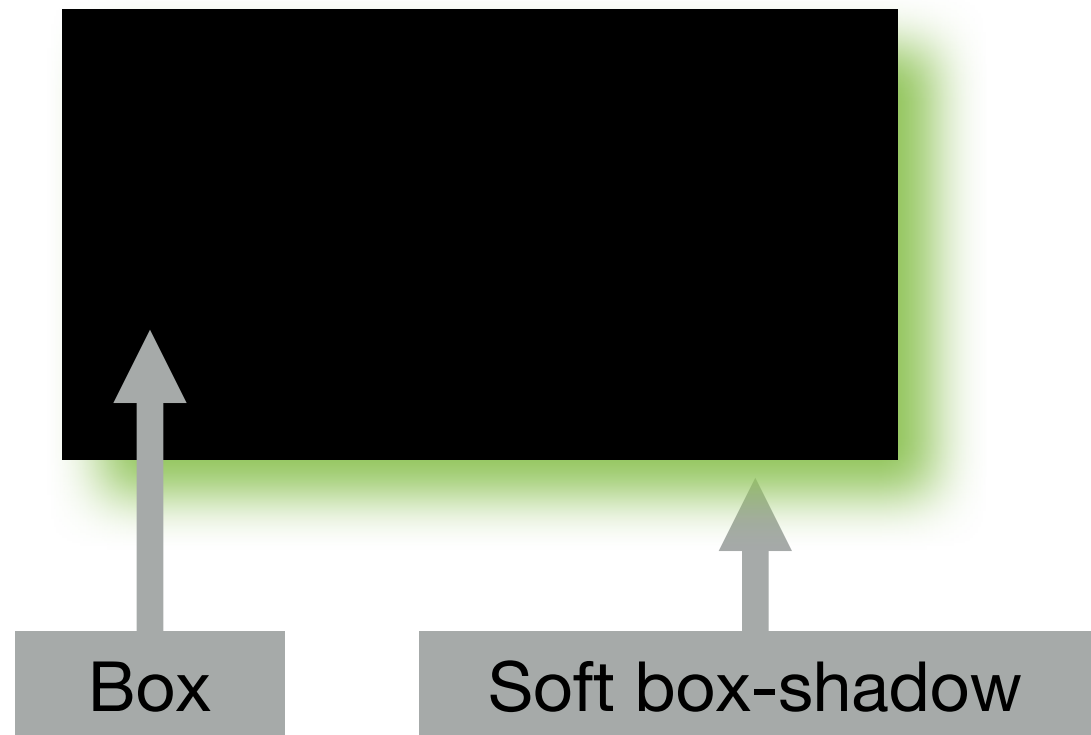
Blur radius

The diagram consists of a light gray rectangular box at the bottom containing the text "Blur radius". A white arrow points vertically upwards from the top center of this box to the third value, "5px", in the box-shadow property of the CSS code above.

If set to a value of “0” the shadow will be **hard edged**.



The higher the blur radius number,
the **softer** the box-shadow will be.



Negative values are **not allowed**
for the bur radius.

Spread distance

The **spread distance** of the shadow is defined fourth.

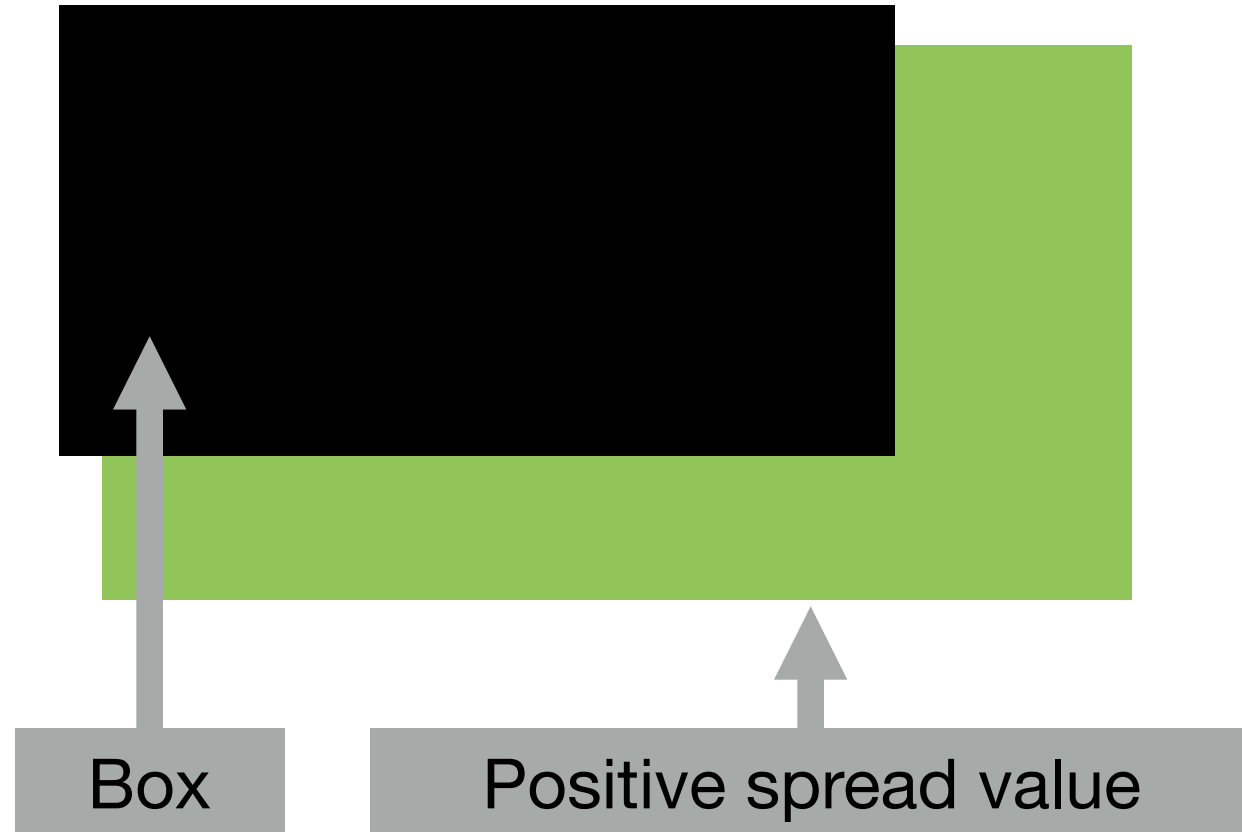
```
/* spread distance */  
p  
{  
    box-shadow: 10px 10px 5px 5px #000 inset;  
}
```



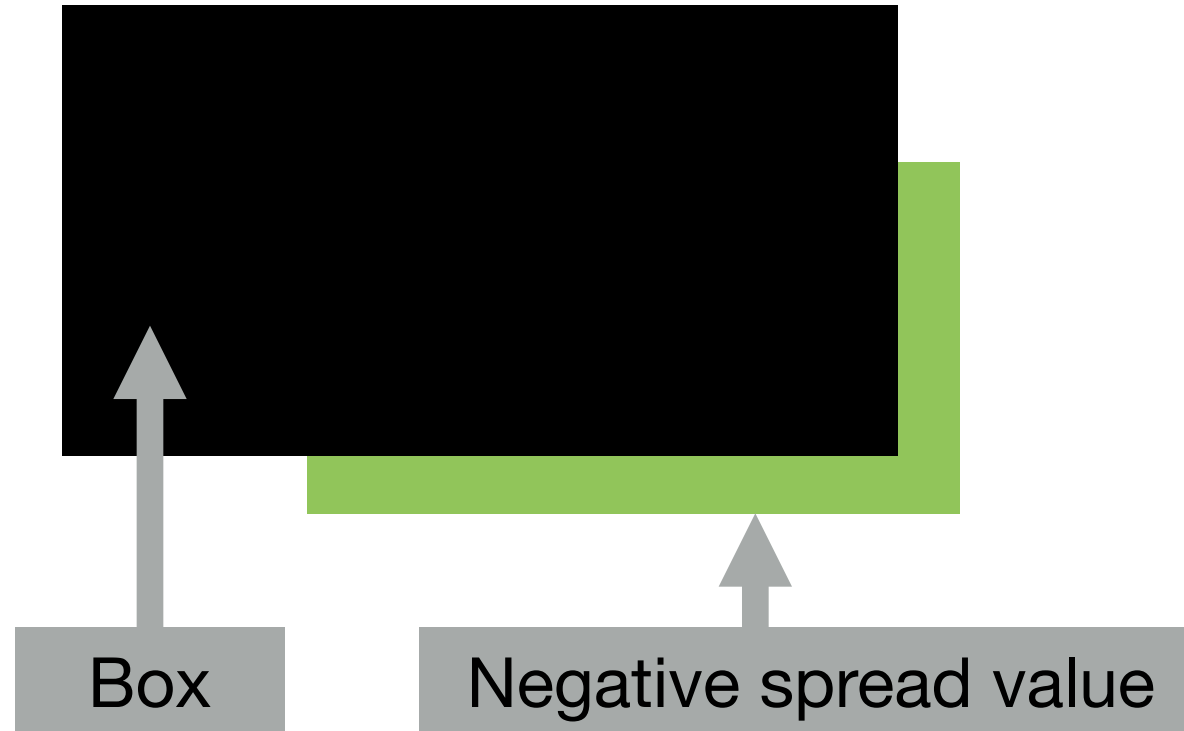
Spread distance

The diagram illustrates the 'spread distance' in the CSS box-shadow property. A grey rectangular box at the bottom contains the text 'Spread distance'. A grey arrow points upwards from this box to the fourth value, '5px', in the 'box-shadow' declaration of the CSS code above. The '5px' value is highlighted in yellow in the original image.

Positive values cause the shadow to **expand in all directions** (so the shadow appears larger than the box).



Negative values cause the shadow to **contract in all directions** (so the shadow appears smaller than the box).



Box-shadow color

The color can be specified using a **variety of methods** including: keyword, hexadecimal notation, RGB/RGBA notation and HSL/HSLA notation.

```
/* box-shadow color */  
p  
{  
    box-shadow: 10px 10px 5px 5px #000 inset;  
}
```



Box shadow color

Box-shadow inset

If the “inset” keyword is present, browsers will **render the box with an inset shadow.**

```
/* box-shadow inset */
```

```
p
```

```
{
```

```
    box-shadow: 10px 10px 5px 5px #000 inset;
```

```
}
```



Inset keyword

Essential and
optional values

Box-shadow **must include the two offset values**. Blur radius, spread, color and inset are optional.

```
/* essential and optional values */  
p  
{  
    box-shadow: 10px 10px 5px 5px #000 inset;  
}
```



If no blur radius is specified,
browsers will **assume a '0' value**
and the shadow will be hard
edged.

```
/* essential and optional values */  
p  
{  
    box-shadow: 10px 10px ? 5px #000 inset;  
}
```



Zero value used if none defined

If no spread is specified, browsers will **assume a '0' value** and the shadow will be the same size as the box.

```
/* essential and optional values */  
p  
{  
    box-shadow: 10px 10px 5px ? #000 inset;  
}
```



Zero value used if none defined

If no color is specified, most browsers will use **the color of the box** as the color value.

```
/* essential and optional values */  
p  
{  
    box-shadow: 10px 10px 5px 5px ? inset;  
}
```



Text color value used if none defined

If no “inset” keyword is specified, browsers will **assume that the shadow is not inset.**

```
/* essential and optional values */  
p  
{  
    box-shadow: 10px 10px 5px 5px #000 ?;  
}
```



No inset used if none defined

Multiple box-shadows

Multiple box shadows can be applied to a box. They are applied as a comma-separated list.

```
/* essential and optional values */
```

```
p  
{
```

```
    box-shadow:
```

```
    10px 10px 5px 5px #000,
```

```
    20px 20px 20px 20px yellow;
```

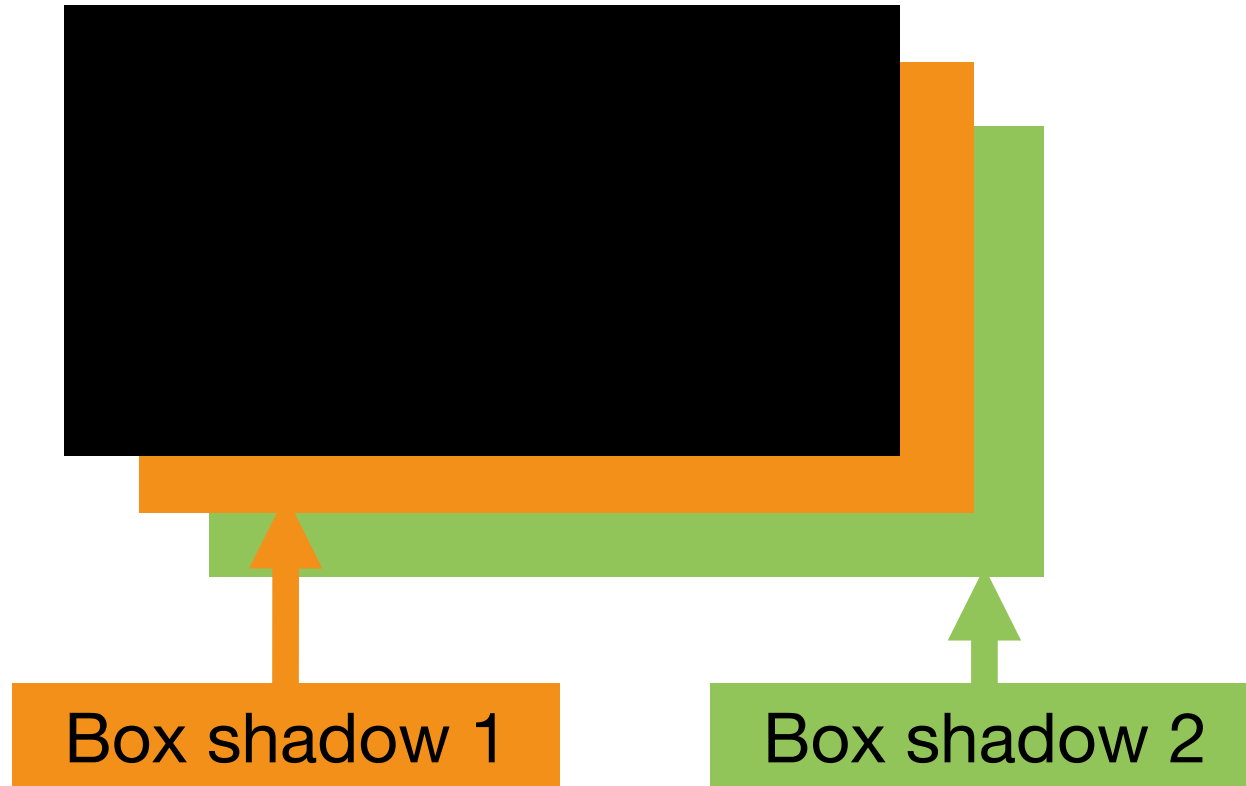
```
}
```



Box-shadow 1

Box-shadow 2

The shadow effects are applied front-to-back: the first shadow is on top and the others are layered behind. Shadows **cannot overlay the box itself.**



Browser support

CSS3 Box-shadow 📄 - CR

Global 91.29% + 0.1% = 91.39%
unprefixed: 91.03%

Method of displaying an inner or outer shadow effect to elements

Current aligned Usage relative Show all

IE	Edge	Firefox	Chrome	Safari	Opera	iOS Safari	Opera Mini	Android Browser	Chrome for Android
								4.1	
8			43					4.3	
9		40	44					4.4	
10		41	45	8		8.4		4.4.4	
11	12	42	46	9	32	9.1	8	44	46
	13	43	47		33				
		44	48		34				
		45	49						



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