

# Appendix F. TSC Compiler Flags for Safety

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## TIP

For a complete list of available compiler flags, head over to the [TypeScript Handbook website](#).

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Each TypeScript release introduces new checks that you can enable to squeeze even more safety out of your code. Some of these flags—prefixed with `strict`—are included as part of the `strict` flag; or, you can opt into `strict` flags one at a time. [Table F-1](#) lists the compiler flags related to safety that are available at the time of writing.

Table F-1. TSC safety flags

Flag	Description
<code>alwaysStrict</code>	Emit <code>'use strict'</code> .
<code>noEmitOnError</code>	Don't emit JavaScript when your code has type errors.
<code>noFallthroughCasesInSwitch</code>	Make sure that every <code>switch</code> case either returns a value or breaks.
<code>noImplicitAny</code>	Error when a variable's type is inferred as <code>any</code> .
<code>noImplicitReturns</code>	Make sure that every code path in every function explicitly returns. See <a href="#">“Totality”</a> .
<code>noImplicitThis</code>	Error when you use <code>this</code> in a function without explicitly annotating the <code>this</code> type. See <a href="#">“Typing this”</a> .
<code>noUnusedLocals</code>	Warn about unused local variables.
<code>noUnusedParameters</code>	Warn about unused function parameters. Prefix your parameter name with <code>_</code> to ignore this error.
<code>strictBindCallApply</code>	Enforce type safety for <code>bind</code> , <code>call</code> , and <code>apply</code> . See <a href="#">“call, apply, and bind”</a> .
<code>strictFunctionTypes</code>	Enforce that functions are contravariant in their

Flag	Description
	parameter and <code>this</code> types. See “ <a href="#">Function variance</a> ”.
<code>strictNullChecks</code>	Promote <code>null</code> to a type. See “ <a href="#">null, undefined, void, and never</a> ”.
<code>strictPropertyInitialization</code>	Enforce that class properties are either nullable or initialized. See <a href="#">Chapter 5</a> .