

**FILM DEVELOPMENT TIME/  
TEMPERATURE**

**COMPENSATION CHART**

This chart is provided as a quick and easy guide for users who need to adjust development times for processing temperatures other than 20°C/68°F. It is a useful guide for all film/development combinations.

To use, find the row with the recommended or normally used development time for the film/developer combination at 20°C/68°F (the shaded column). Follow the row, left or right until it matches the column for the required temperature and read off the new development time.

For example, if 8 minutes at 20°C/68°F is recommended, the compensated development time for 24°C/75°F will be 5 minutes and 30 seconds.

Please note that for ease of use development times have been rounded to the nearest 15 seconds.

DEVELOPMENT TIMES BELOW 5 MINUTES ARE NOT RECOMMENDED DUE TO THE RISK OF UNEVEN DEVELOPMENT.

18°C/64°F	19°C/66°F	20°C/68°F	21°C/70°F	22°C/72°F	24°C/75°F	25°C/77°F	27°C/80°F
5:00	4:30	4:00	3:30	3:15	2:30	-	-
5:30	5:00	4:30	4:00	3:45	3:00	-	-
6:00	5:30	5:00	4:30	4:00	3:15	-	-
6:30	6:00	5:30	5:00	4:30	3:30	-	-
7:15	6:30	6:00	5:30	5:00	4:00	3:45	-
8:00	7:15	6:30	6:00	5:15	4:30	4:00	3:30
8:45	7:45	7:00	6:30	5:45	5:00	4:30	3:45
9:15	8:15	7:30	6:45	6:00	5:15	4:45	4:00
9:45	8:45	8:00	7:15	6:30	5:30	5:00	4:15
10:30	9:30	8:30	7:45	7:00	6:00	5:30	4:45
11:15	10:00	9:00	8:00	7:15	6:15	5:45	5:00
11:45	10:30	9:30	8:30	7:45	6:30	6:00	5:15
12:30	11:15	10:00	9:00	8:00	7:00	6:15	5:30
13:00	11:45	10:30	9:30	8:30	7:15	6:30	5:45
13:45	12:15	11:00	10:00	9:00	7:30	6:45	6:00
14:15	12:45	11:30	10:30	9:15	8:00	7:15	6:15
14:45	13:15	12:00	10:45	9:45	8:15	7:30	6:30
15:15	13:45	12:30	11:15	10:00	8:45	8:00	7:00
16:00	14:30	13:00	11:45	10:30	9:00	8:15	7:00
16:45	15:00	13:30	12:00	11:00	9:15	8:30	7:15
17:15	15:30	14:00	12:30	11:15	9:45	9:00	7:45
17:45	16:00	14:30	13:00	11:45	10:00	9:00	7:45
18:30	16:45	15:00	13:30	12:15	10:30	9:30	8:00
19:15	17:15	15:30	14:00	12:45	10:45	9:45	8:15
19:45	17:45	16:00	14:30	13:00	11:00	10:00	8:30
20:30	18:30	16:30	14:45	13:30	11:30	10:15	8:45
21:00	19:00	17:00	15:15	13:45	11:45	10:30	9:00
21:45	19:30	17:30	15:45	14:15	12:00	10:45	9:15
22:15	20:00	18:00	16:15	14:30	12:30	11:15	9:45
22:45	20:30	18:30	16:45	15:00	12:45	11:30	9:45
23:30	21:00	19:00	17:15	15:30	13:15	12:00	10:15
24:15	21:45	19:30	17:30	16:00	13:30	12:15	10:30
24:45	22:15	20:00	18:00	16:15	13:45	12:30	10:45
25:15	22:45	20:30	18:30	16:45	14:15	12:45	11:00
26:00	23:30	21:00	19:00	17:00	14:30	13:00	11:15
26:30	23:45	21:30	19:30	17:30	15:00	13:30	11:30
27:15	24:30	22:00	19:45	17:45	15:15	13:45	11:45
27:45	25:00	22:30	20:15	18:15	15:30	14:00	12:00
28:15	25:30	23:00	20:45	18:45	16:00	14:30	12:30
28:45	26:00	23:30	21:00	19:00	16:15	14:45	12:45
29:45	26:45	24:00	21:45	19:30	16:45	15:00	13:00
30:15	27:15	24:30	22:00	19:45	17:00	15:15	13:00
30:45	27:45	25:00	22:30	20:15	17:15	15:30	13:15