

CME GROUP POSITIONAL-FORMAT SETTLEMENT PRICE FILE LAYOUT

Updated November 27, 2017

HEADER RECORD

POSITIONS From To		FIELD NAME AND FORM	FORMAT	DESCRIPTION AND COMMENTS
01	01	RECORD TYPE CODE X(1)	A	"1" header record
02	03	EXCHANGE CODE X(2)	A	Old two-digit values, 01 for CBOT, 02 for CME
04	06	EXCHANGE ACRONYM X(3)	A	
07	14	BUSINESS DATE 9(8)	N	YYYYMMDD
15	22	CREATION DATE 9(8)	N	YYYYMMDD
23	26	CREATION TIME 9(4)	N	HHMM
27	51	FILE DESCRIPTION X(25)	A	"SETTLEMENT PRICE FILE"
52	57	FILE RECORD COUNT 9(6)	N	Including header record
58	80	FILL X(71)	AN	Blank

Notes:

This document describes the positional ("flat") format settlement price file published by CME Clearing. We recommend that users investigate switching to the new-and-improved FIXML format, which contains additional data not provided in the positional format, and always contains prices in pure decimal format.

Files are published separately for each exchange. Typically the "e" (early) file contains most but not necessarily all end-of-day prices, and the "s" (settlement, or final) file contains all end-of-day settlement prices for all active contracts. Note that final settlement price files are typically available about 30 minutes earlier than the end-of-day final SPAN® file.

Files are published on the Internet, at <ftp.cmegroup.com/pub/settle>, and on the Firm FTP Server in the pub/settle directory. Any FTP client application or web browser can be used to download them.

In 2010, the format was updated with the fourteen-digit High-Precision Settlement Price field. This field will be populated for **all** contracts, and in the vast majority of cases contains the exact same value as provided in the regular Settlement Price field except that seven zeros are prepended to the value. In case a price cannot fit in seven digits, however, only the high-precision field is correctly populated, with zero's provided in the regular field. You can distinguish the two cases by checking the High-Precision Price Flag field in byte 127, which will have an **N** in the normal case where the price fits into the regular field, and a **Y** in the special case where you can only read the price from the new high-precision field.

In 2017, the format is updated with the addition of the high-precision fields for the range high and low prices. The exact same logic applies to the population of these fields as to the settlement price fields, and note that the sign fields for the settlement price, high and low prices apply to both the regular price field and the high-precision field.

SETTLEMENT PRICE FILE RECORD LAYOUT
PRICE RECORD LAYOUT

POSITIONS From To		FIELD NAME AND FORM	FORMAT	DESCRIPTION AND COMMENTS
01	01	RECORD CODE 9	N	always "9"
02	05	PRODUCT CODE X(4)	AN	Clearing product code, for products with clearing codes up to 4 bytes in length. Blank for products with clearing codes longer than 4 bytes.
06	12	RANGE HIGH PRICE X(7)	AN	Right-justified number with leading blanks
13	13	BID/ASK INDICATOR FOR RANGE HIGH PRICE X	AN	B=Bid, A=Ask, or blank
14	20	RANGE LOW PRICE X(7)	AN	Right-justified number with leading blanks
21	21	BID/ASK INDICATOR FOR RANGE LOW PRICE X	AN	B=Bid, A=Ask, or blank
22	22	FILLER X	AN	
23	29	SETTLEMENT PRICE X(7)	AN	Right-justified number with leading blanks, or all 9's for "fixed cabinet" option prices
30	31	Special Settlement Price Indicator	AN	Blank or asterisk, where asterisk indicates a special final settlement price. A special final settlement price is one which may not correspond to standard tick or format rules for normal daily settlement prices, and will only occur on the final settlement date for certain cash-settled futures contracts.
32	32	FLEX INDICATOR X	AN	'Y' indicates flex contract
33	40	CONTRACT PERIOD CODE X(8)	N	CCYYMMDD where DD will be zeroes for standard monthly futures and options. For futures or options with expiration specific to the day – for example, for flexible options – the last two bytes are the two-digit day number.
41	41	EXPIRATION STYLE X	AN	A = American Style, E = European Style
42	45	OPTION DELTA RISK FACTOR 9V999	N	blanks if futures record
46	49	FILLER X(4)	AN	
50	50	OPTION PUT/CALL INDICATOR X	AN	P=Put, C=Call, Blank=Futures
51	57	OPTION STRIKE PRICE 9(7)	N	blank if futures record
58	61	FILLER X(4)	AN	
62	62	MONTH CODE X	AN	TCC Contract Month Code, Values are 0 Through 9, "-" Or "&"
63	63	YEAR CODE 9	N	TCC Contract Year Code, 0 through 9

POSITIONS From To		FIELD NAME AND FORM	FORMAT	DESCRIPTION AND COMMENTS
64	64	CONTRACT - OPEN X	AN	space = actively traded * = not actively traded
65	65	OPTION CABINET INDICATOR FOR HIGH X	AN	For range high price, "C" indicates option cabinet price
66	66	OPTION CABINET INDICATOR FOR LOW X	AN	For range low price, "C" indicates option cabinet price
67	67	OPTION CABINET INDICATOR FOR SETTLE X	AN	For settlement price, "C" indicates option cabinet price
68	68	FILLER X	AN	
69	72	UNDERLYING CONTRACT X(4)	AN	Underlying future contract for The option (YYMM)
73	76	UNDERLYING PRODUCT CODE X(4)	AN	Product code for the underlying future, if that code is four bytes or less. Blank otherwise.
77	78	PRICE REPORTING SYSTEM COMMODITY CODE XX	AN	Price reporting system product code
79	79	PRICE REPORTING SYSTEM MONTH CODE X	AN	Price reporting system month code
80	80	PRICE REPORTING SYSTEM YEAR CODE X	AN	Price reporting system year code, 0 through 9
81	90	Expanded Product Code X(10)	AN	Contains the clearing product code for all contracts. The main product code field in bytes 2-5 will be populated only if the product code is 4 bytes or less in length.
91	100	Expanded Underlying Product Code X(10)	AN	Contains the clearing product code for the underlying of an option, for all option contracts. The main underlying product code field in bytes 73-76 will be populated only if the underlying product code is 4 bytes or less in length.
101	101	Range High Price Sign X	AN	Values are: Blank or "+"= Positive, "-=" Negative
102	102	Range Low Price Sign X	AN	Values are: Blank or "+"= Positive, "-=" Negative
103	103	Settlement Price Sign X	AN	Values are: Blank or "+"= Positive, "-=" Negative

POSITIONS From To		FIELD NAME AND FORM	FORMAT	DESCRIPTION AND COMMENTS
104	104	Strike Price Sign X	AN	Values are: Blank or "+"= Positive, "-=" Negative
105	112	Underlying Product Period Code X	AN	YYYYMMDD, where "DD" may be left blank or contain weekly information (W1,W2,etc.)
113	126	High-Precision Settlement Price 9(14)	N	
127	127	High-Precision Settlement Price Flag X	AN	N means that the price is not high-precision and can be read from either the regular or the high-precision price field. Y means the price is high-precision and must be read from the high-precision field.
128	141	High-Precision Range High Price 9(14)	N	
142	155	High-Precision Range Low Price 9(14)	N	