A-A-272
February 26, 1980

COMMERCIAL ITEM DESCRIPTION
CAULKING COMPOUNDS

The General Services Administration has authorized the use of this commercial item description in lieu of Federal Specifications TT-S-001543, TT-S-001657, and TT-C-00598.

This commercial item description covers four types of caulking compounds suitable for use as recommended by the manufacturer for sealing, caulking, and glazing operations in buildings and other types of construction:

Type I - Oil base caulk.
Type II - Latex caulk.
Type III - Butyl rubber caulk.
Type IV - Silicone caulk.

The sealants shall meet the requirements set forth in table I and they shall maintain a seal against water, wind, and dirt after being applied to joints of up to 3/8" by 3/8" using a caulking gun or hand tool.

TABLE I. Requirements

Requirements	Type I Oil Base Caulk	Type II Latex Caulk	Type III Butyl Rubber Caulk	Type IV Silicone Caulk	Test Method
Total joint Movement	±5% Gun ±2% Knife	10%	15%	50%	
Stability (when stored below 27° C)	12 mos	12 mos	12 mos	6 mos	
Standard Colors	black, natural, limestone, white gray, bronze	white, gray, bronze, limestone, black	white, gray bronze, black, limestone	white, natural, stone, black, bronze, gray, clear	
Application Temp (° C)	5 to 38	>10	5 to +50	5 to +60	
Service Temp (° C)	-20 to 65	-30 to 80	-45 to 95	-50 to 120	
Lifetime (yrs)	2-5	5-10	5-15	10-20	
Drying time before painting	3-5 days	2 hrs	7 days	Do not paint	
Extrudability	9 sec/ml		9 sec/ml	45 sec using 6 oz power gun 6 oz cartridge 50 psi	ASTM D 2452
		2 g/sec min.			ASTM C 731
Artificial weathering-heat aging	No cracking or chalking		No cracking, chalking, color change	No cracking, chalking, loss of peel strength or weight loss >10%	ASTM C 792
		No washout, slump, cracking, 25% max. adhesion loss			ASTM C 732
Volume shrinkage (max.)	20%				ASTM D 2453
		30%	25%	25%	ASTM C 733
Low temperature flexibility	No cracking through to substrate or adhesion loss	No cracking through to substrate or adhesion loss	No cracking through to substrate or adhesion loss	No cracking through to substrate or adhesion loss	ASTM C 734
Recovery (minimum)		75%			ASTM C 736
Adhesion loss (maximum)		25%			ASTM C 736
			25%	25%	ASTM C 794
Peel Strength		10-12 ppi		25 ppi	ASTM C 794
Bond	Loss of <10%				ASTM D 2450
Tenacity	No cracks				ASTM D 2453
		No cracks	No cracks	No cracks	ASTM C 711
Slump (max)	4mm				ASTM C 713
		4mm	4mm	4mm	ASTM D 2202
Stain Index (max)	S value = 6 T value = 1.5	S value = 3	S value = 2.5 T value = 1.0	S value = 0	ASTM D 2203
Tack-free time	72 hr gun 120 hr knife	<1 hr		72 hr	ASTM D 2377
			<24 hr		ASTM C 679
Hardness		45 max	40 max	15 - 50	ASTM D 2240
Bubble formation			<25% of area		

The issue of ASTM test methods in effect on the date of the solicitation shall be used to determine compliance with stated requirements.

Certification. The contractor shall certify that the product offered meets the salient characteristics of this description and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices and is the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

Recovered materials. The manufacturer shall utilize recovered materials to the maximum extent practicable.

Packaging, packing, and marking. The caulking compound shall be packaged in accordance with normal commercial practice, and packed to assure acceptance by common carrier and provide product protection against loss and damage during multiple shipments, handling, and storage. The shipping container shall be in compliance with National Motor Freight Classification. Marking shall be in accordance with the contract or order.

ASTM Standards are available from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.