

September 27, 1965
Supersedes Formula No. TEX-993
Dated June 7, 1965

PLAINTIFF'S EXHIBIT

GP-444

ACME TEXAS PLANT FORMULA

ONE DAY WALLBOARD JOINT COMPOUND TEX-993

DESCRIPTION OF PRODUCT - For use in all applications in the reinforcing and concealing of joints, except the final finish.

FORMULA

<u>Raw Material</u>	<u>Source</u>	<u>R.M. Spec.</u>	<u>%</u>
Sodium Citrate*	Open Market	134	0.125
Natrosol 250 HXR (Fine Grind)	Hercules Powder	170	0.50
Gelvato 20-30 BP	Shawinigan Resins Co.	162	1.50
Gelva D-702	Shawinigan Resins Co.	161	3.00
Clay, ASP-100	Minerals Chemicals Co.	167	3.00
Asbestos 7RF-9	Phillip Carey Co.	9	4.50
-/ TEX-38	Bestwall Gypsum, Acme		87.075
Petro-AD	The Thornley Co.	143	0.100
Yellow Oxide #2087	C. K. Williams Co.	139	0.200
			<u>100.000%</u>

*Vary to adjust setting time.

Working Consistency - Refer to Plant Testing Procedure No. 32.

<u>Specification</u>	<u>- Maximum</u>	<u>Minimum</u>	<u>Average</u>
	62	58	60

Setting Time - Refer to Plant Testing Procedure No. 6 (slow set).

<u>Specification</u>	<u>- Maximum</u>	<u>Minimum</u>	<u>Average</u>
	3 hrs.	2 hrs.	3 hrs.
	45 mins.	45 mins.	15 mins.

Working Properties - Refer to Plant Testing Procedure No. 33.

Specification - Must be plastic and buttery working; free of grit or coarse particles.

Bonding Properties - Refer to Plant Testing Procedure No. 35.

Specification - After compound has dried, tape shall delaminate when peeled back.

Crack Resistance - Refer to Plant Testing Procedure No. 37.

Specification - There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

-/ Denotes change in this reissue.

DAM:se

SGP 0018381

March 4, 1966
Supersedes Formula No. TEX-993
Dated September 27, 1965

ACME, TEXAS PLANT FORMULA

ONE DAY WALLBOARD JOINT COMPOUND TEX-993

DESCRIPTION OF PRODUCT - For use in all applications in the reinforcing and concealing of joints, except the final finish.

FORMULA

<u>Raw Material</u>	<u>Source</u>	<u>R.M. Spec.</u>	<u>%</u>
-/ Sodium Citrate*	Open Market	134	.25
Natrosol 250 HXR			
(Fine Grind)	Hercules Powder	170	0.50
Gelvatol 20-30 BP	Shawinigan Resins Co.	162	1.50
Gelva D-702	Shawinigan Resins Co.	161	3.00
Clay, ASP-100	Minerals Chemicals Co.	167	3.00
Asbestos 7RF-9	Phillip Carey Co.	9	4.50
-/ TEX-38	Bestwall Gypsum, Acme	-	86.95
Petro-AD	The Thornley Co.	143	0.100
Yellow Oxide #2087	C. K. Williams Co.	139	0.200

*Vary to adjust setting time.

100.000%

-/ Working Consistency - Refer to Plant Testing Procedure No. 32.

<u>Specification</u>	- <u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	60	56	58

-/ Setting Time - Refer to Plant Testing Procedure No. 6 (slow set)

<u>Specification</u>	- <u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	4 hrs.	3 hrs.	4 hrs.
	30 mins.	30 mins.	

Working Properties - Refer to Plant Testing Procedure No. 33.

Specification - Must be plastic and buttery working; free of grit or coarse particles.

Bonding Properties - Refer to Plant Testing Procedure No. 35.

Specification - After compound has dried, tape shall delaminate when peeled back.

Crack Resistance - Refer to Plant Testing Procedure No. 37.

Specification - There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

-/ Denotes change in this re-issue.

DAM:se

SGP 0018382

December 26, 1967
Supersedes Formula No. TEX-99
Dated June 14, 1967

ACME, TEXAS PLANT FORMULA

ONE DAY WALLBOARD JOINT COMPOUND TEX-993

DESCRIPTION OF PRODUCT - For use in all applications in the reinforcing and concealing of joints, except the final finish.

FORMULA

<u>Raw Material</u>	<u>Source</u>	<u>R.M. Spec.</u>	<u>Percent</u>
Sodium Citrate*	Open Market	134	0.25
Natrosol 250 HXR (Fine Grind)	Hercules Powder	170	0.50
Gelvatol 20-30 BP	Shawinigan Resins Co.	162	1.50
Gelva D-702	Shawinigan Resins Co.	161	3.00
Clay K-70	Magcobar Minerals Co.	167	3.00
Asbestos 7RF-9	Phillip Carey Co.	9	4.50
TEX-38	Acme Plant	-	86.95
Petro-AD	The Thornley Co.	143	0.10
Yellow Oxide #2087	C. K. Williams Co.	139	0.20
			<u>100.00</u>

*Vary to adjust setting time.

WORKING CONSISTENCY - Refer to Plant Testing Procedure No. 32.

<u>Specification:</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	60	56	58

-/ SETTING TIME - Refer to Plant Testing Procedure No. 6 (slow set)

<u>Specification:</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	4 hrs.	3 hrs.	3 hrs. 30 mins.

WORKING PROPERTIES - Refer to Plant Testing Procedure No. 33.
Specification: Must be plastic and buttery working; free of grit or coarse particles.

BONDING PROPERTIES - Refer to Plant Testing Procedure No. 35.
Specification: After compound has dried, tape shall delaminate when peeled back.

CRACK RESISTANCE - Refer to Plant Testing Procedure No. 37.
Specification: There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

-/ Denotes change in this reissue.

ACME, TEXAS PLANT FORMULA

ONE DAY WALLBOARD JOINT COMPOUND TEX-993

DESCRIPTION OF PRODUCT - For use in all applications in the reinforcing and concealing of joints, except the final finish.

FORMULA

<u>Raw Material</u>	<u>Source</u>	<u>R.M. Spec.</u>	<u>Percent</u>
Sodium Citrate*	Open Market	134	0.25
Natrosol 250 HXR (Fine Grind)	Hercules Powder	170	0.50
Gelvatol 20-30 BP	Shawinigan Resins Co.	162	1.50
Gelva D-702	Shawinigan Resins Co.	161	3.00
Clay K-70	Magcobar Minerals Co.	167	3.00
Asbestos 7RF-9	Phillip Carey Co.	9	4.50
TEX-38	Acme Plant	-	86.95
Petro-AD	The Thornley Co.	143	0.10
Yellow Oxide #2087	C. K. Williams Co.	139	0.20
			100.00

*Vary to adjust setting time.

WORKING CONSISTENCY - Refer to Plant Testing Procedure No. 32.
Specification: Maximum Minimum Average
 60 56 58

**SETTING TIME - Refer to Plant Testing Procedure No. 6 (slow set)
Specification: Maximum Minimum Average
 4 hrs. 3 hrs. 3 hrs. 30 mins.

WORKING PROPERTIES - Refer to Plant Testing Procedure No. 33.
Specification: Must be plastic and buttery working; free of grit or coarse particles.

BONDING PROPERTIES - Refer to Plant Testing Procedure No. 35.
Specification: After compound has dried, tape shall delaminate when peeled back.

CRACK RESISTANCE - Refer to Plant Testing Procedure No. 37.
Specification: There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

-/ **REMARKS - Shipments to The Flintkote Co. shall have a set of 1½ to 2½ hours (2 hr. average) tested at the consistency shown in ASTM Designation C474.

-/ Denotes change in this reissue

ACME, TEXAS PLANT FORMULA

ONE DAY WALLBOARD JOINT COMPOUND TEX-993

DESCRIPTION OF PRODUCT - For use in all applications if the reinforcing and concealing of joints, except the final finish.

FORMULA

<u>Raw Material</u>	<u>Source</u>	<u>R.M. Spec.</u>	<u>Percent</u>
Sodium Citrate*	Open Market	134	0.10 0.25
Natrosol 250 HXR (Fine Grind)	Hercules Powder	170	0.50
Gelvatol 20-30 BP	Shawinigan Resins Co.	162	1.50 30
Gelva D-702	Shawinigan Resins Co.	161	3.00 60
Clay K-70	Magcobar Minerals Co.	167	3.00
Asbestos 7R-9	Phillip Carey Co.	9	4.50
TEX-38	Acme Plant	---	86.95
Petro-AD	The Thornley Co.	143	0.10
Yellow Oxide #2087	C. K. Williams Co.	139	0.20
			<u>100.00</u>

* Vary to adjust setting time.

WORKING CONSISTENCY - Refer to Plant Testing Procedure No. 32.

<u>Specification:</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	60	56	58

SETTING TIME - Refer to Plant Testing Procedure No. 6 (slow set).

<u>Specification:</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	3 hrs.	2 hrs.	2½ hrs.

WORKING PROPERTIES - Refer to Plant Testing Procedure No. 33.

Specification: Must be plastic and buttery working; free of grit or coarse particles.

BONDING PROPERTIES - Refer to Plant Testing Procedure No. 35.

Specification: After compound has dried, tape shall delaminate when peeled back.

CRACK RESISTANCE - Refer to Plant Testing Procedure No. 37.

Specification: There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

REMARKS

- Shipments to The Flintkote Co. shall have a set of 1½ to 2½ hours (2 hr. average) tested at the consistency shown in ASTM Designation C474.

-/ Denotes change in this reissue.

JRW:kge

February 12, 1970
Supersedes Formula 993
Dated 6/24/68

ACME, TEXAS PLANT FORMULA

SPEED SET JOINT COMPOUND (YELLOW) TEX-993
(60 Minute and 2 hour working cement)

DESCRIPTION OF PRODUCT - For use in reinforcing and concealing joints and nailheads.

-/ FORMULA

<u>Raw Material</u>	<u>Function</u>	<u>R.M. Spec.</u>	<u>Percent</u>	<u>Lbs/Batch</u>
*Sodium Citrate	Retarder	134	0.1	2 12 02
Natrosol 25 HXR	Thickner	170	0.2	4 1 18 8 02
Gelvatol RS-6219	Adhesive	162	3.0	60 22 18 5 02
Gelva GP702	Adhesive	167	1.0	20 7 18 8 02
Asbestos 7RF-9	Fiber Filler	9	3.5	70 26 18 4 02
Defoamer M111	Defoamer	196	0.1	2 12 02
TEX-38	Plaster	-	91.9	1838 689 18 4 02
Yellow Oxide	Pigment	139	.2	4 1 18 8 02
			100.0	2000

* Adjust quantity according to set time requirements.

<u>WORKING CONSISTENCY</u>	- Refer to Plant Testing Procedure No. 32.
Specifications:	<u>Maximum</u> <u>Minimum</u> <u>Average</u>
	60 56 58

<u>SETTING TIME</u>	- Refer to Plant Testing Procedure No. 6 (slow set)
Specifications:	<u>Maximum</u> <u>Minimum</u> <u>Average</u>
	110 mins. 70 mins. 90 mins.
	3½ hours 2½ hours 3 hours.

<u>WORKING PROPERTIES</u>	- Refer to Plant Testing Procedure No. 33.
Specifications:	Must be plastic and buttery working; free of grit or coarse particles.

<u>BONDING PROPERTIES</u>	- Refer to Plant Testing Procedure No. 35.
Specifications:	After compound has dried, tape shall delaminate when peeled back.

<u>CRACK RESISTANCE</u>	- Refer to Plant Testing Procedure No. 37.
Specifications:	There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

-/ Denotes change in this reissue.

EDO:dek

SGP 0018386

ACME, TEXAS PLANT FORMULA

SPEED SET JOINT COMPOUND (YELLOW) TEX-993
(60 minute and 2 hour working cement)

DESCRIPTION OF PRODUCT: - For use in reinforcing and concealing joints and nailheads.

<u>FORMULA</u>				
<u>Raw Material</u>	<u>Function</u>	<u>R,M,Spec.</u>	<u>Percent</u>	<u>Lbs/Batch</u>
*Sodium Citrate	Retarder	134	0.1	2 12 02
Cellosize QP 100,000	Thickner		0.2	4 1 13 802
Gelvatol RS-6219	Adhesive	162	3.0	60 22 5
Gelva GP702	Adhesive	167	1.0	20 7 8
Asbestos 7RF-9	Fiber Filler	9	3.5	70 26 4
Defoamer M111	Defoamer	196	0.1	2 12
TEX-38	Plaster	-	91.9	1838 689 4
Yellow Oxide	Pigment	139	2	4 1 802
			100.0	2000

* Adjust quantity according to set time requirements.

WORKING CONSISTENCY: - Refer to Plant Testing Procedure No. 32.
Specifications:

<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
60	56	58

SETTING TIME: - Refer to Plant Testing Procedure No. 6 (slow set)
Specifications:

<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
110 mins.	70 mins.	90 mins.
994 → 3½ hours	2½ hours	3 hours

WORKING PROPERTIES: - Refer to Plant Testing Procedure No. 33.
Specifications: Must be plastic and buttery working; free of grit or coarse particles.

BONDING PROPERTIES: - Refer to Plant Testing Procedure No. 35.
Specifications: After compound has dried, tape shall delaminate when peeled back.

CRACK RESISTANCE: - Refer to Plant Testing Procedure No. 37.
Specifications: There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

-/ Denotes change in this reissue.

EDO:dek

June 29, 1971
Supersedes Formula 993
Dated 2/27/70

ACME, TEXAS PLANT FORMULA

SPEED SET JOINT COMPOUND (YELLOW) TEX-993
(60 minute and 2 hour working cement)

DESCRIPTION OF PRODUCT: - For use in reinforcing and concealing joints and nailheads.

-/ FORMULA:

<u>Raw Material</u>	<u>Function</u>	<u>R. M. Spec.</u>	<u>Percent</u>	<u>Lbs/Batch</u>
Yellow Oxide	Pigment	138	0.20	1.500
*Sodium Citrate	Retarder	134	0.10	0.750
Natrosol 250HXR	Thickner	170	0.20	1.500
Gelvato RS-6278C	Adhesive	162	2.25	16.875
Gelva GP702	Adhesive	167	0.50	3.750
Asbestos SG210	Fiber Filler	-	0.50	3.750
Asbestos 7RF09	Fiber Filler	9	2.25	16.875
Mica p80H	Anti-Cracking Agent	11	4.00	30.000
Defoamer M111	Anti-Foaming Agent	196	0.05	0.375
Vanicide	Fungicide	126	0.05	0.375
TEX-38	Plaster	-	89.90	674.250
*Adjust quantity according to set time requirements.			100.00	750.000

-/ WORKING CONSISTENCY: - Refer to Plant Testing Procedure No. 32.
Specifications Maximum Minimum Average
62 58 60

SETTING TIME: - Refer to Plant Testing Procedure No. 6 (slow set)
Specifications Maximum Minimum Average
110 mins. 70 mins. 90 mins.
394 3½ hours 2½ hours 3 hours

WORKING PROPERTIES: - Refer to Plant Testing Procedure No.33.
Specifications Must be plastic and buttery working; free of grit or coarse particles.

BONDING PROPERTIES: - Refer to Plant Testing Procedure No. 35.
Specifications After compound has dried, tape shall delaminate when peeled back.

CRACK RESISTANCE: - Refer to Plant Testing Procedure No. 37.
Specifications There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

-/ Denotes change in this reissue.

EDO:dek

SGP 0018388

May 10, 1973
Formula TEX-993
NEW

ACME, TEXAS PLANT FORMULA
SPEED SET JOINT COMPOUND WHITE TEX-993
(1 Hour Working Cement)

DESCRIPTION OF PRODUCT - For use in reinforcing and concealing joints and nailheads. To be supplied to Chicago plant only.

FORMULA

<u>Raw Material</u>	<u>Function</u>	<u>RM Spec</u>	<u>Percent</u>	<u>Lbs/Batch</u>
Natrosol	Water retention	170	.40	3.000
Vancide	Fungicide	126	.10	.750
Gelvato1 5000	Adhesive	162	1.50	11.250
Attagel 40	Bulking agent	8	4.50	33.750
Mica P80-H	Anti-cracking agent	11	8.00	60.000
Defoamer M111	Anit-foaming agent	--	.10	.750
Denscal	Plaster	--	84.57	634.275
* Potash (-100 mesh K ₂ SO ₄)	Accelerator	--	.75	5.625
* Com. Retarder	Retarder	--	.08	.600
			100.00	750.000

*Adjust quantity according to set time requirements. Increase amounts for longer working formulas.

WORKING CONSISTENCY - Refer to Plant Testing Procedure No. 32.

<u>Specifications</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	60	55	58

SETTING TIME - Refer to Plant Testing Procedure No. 6 (slow set)
Specifications Minimum: 1-1/4 hr. Maximum: 1-3/4 hr.

WORKING PROPERTIES - Refer to Plant Testing Procedure No. 33.
Specifications Must be plastic and buttery working; free of grit or coarse particles.

BONDING PROPERTIES - Refer to Plant Testing Procedure No. 35.
Specifications After compound has dried, tape shall delaminate when peeled back.

CRACK RESISTANCE - Refer to Plant Testing Procedure No. 37.
Specifications There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

WNG:elz

* Potassium Sulfate

709 = 1 hr
994-10-09 = 3 hr

SGP 0018389

July 25, 1973
Supersedes TEX-993
Dated 5/10/73

ACME, TEXAS PLANT FORMULA
SPEED SET JOINT COMPOUND WHITE TEX-993
(1 Hour Working Cement)

DESCRIPTION OF PRODUCT - For use in reinforcing and concealing joints and nailheads. To be supplied to Chicago plant only.

-/ FORMULA

<u>Raw Material</u>	<u>Function</u>	<u>RM Spec</u>	<u>Percent</u>	<u>Lbs/Batch</u>
Natrosol	Water retention	170	.40	3.000
Vancide	Fungicide	126	.10	.750
Gelvatol 6000	Adhesive	162	1.50	11.250
Attagel 40	Bulking agent	8	4.50	33.750
Mica P80-H	Anti-cracking agent	11	8.00	60.000
Defoamer M111	Anit-foaming agent	--	.10	.750
Denscal	Plaster	--	84.59	634.425
* Potash (-100 mesh K ₂ SO ₄)	Accelerator	--	.75	5.625
* Com. Retarder	Retarder	--	.06	.450 X
			100.00	750.000

*Adjust quantity according to set time requirements. Increase amounts for longer working formulas.

WORKING CONSISTENCY - Refer to Plant Testing Procedure No. 32.

<u>Specifications</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	60	55	58

SETTING TIME - Refer to Plant Testing Procedure No. 6 (slow set)
Specifications Minimum: 1-1/4 hr. Maximum: 1-3/4 hr.

WORKING PROPERTIES - Refer to Plant Testing Procedure No. 33.
Specifications Must be plastic and buttery working; free of grit or coarse particles.

BONDING PROPERTIES - Refer to Plant Testing Procedure No. 35.
Specifications After compound has dried, tape shall delaminate when peeled back.

CRACK RESISTANCE - Refer to Plant Testing Procedure No. 37.
Specifications There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

-/ denotes change

WNG:elz

* Potassium Sulfate
9-21-73
x 7.03 4 1/2 oz

SGP 0018390

March 7, 1974
Supersedes TEX-993
Dated 7/25/73

ACME, TEXAS PLANT FORMULA
SPEED SET JOINT COMPOUND WHITE TEX-993
(1 Hour Working Cement)

-/ DESCRIPTION OF PRODUCT - For use in reinforcing and concealing joints and nailheads.

-/ FORMULA

<u>Raw Material</u>	<u>Function</u>	<u>RM Spec</u>	<u>Percent</u>	<u>Lbs/Batch</u>
Methocel 228	Water retention	170	.20	1.500
Vancide	Fungicide	.26	.10	.750
Gelvato1 6000	Adhesive	.62	1.50	11.250
Attagel 40	Bulking agent	8	5.50	41.250
Mica P80-H	Anti-cracking agent	11	8.00	60.000
Defoamer M111	Anit-foaming agent	--	.10	.750
Denscal	Plaster	--	78.79	590.925
Potash (-100 mesh K ₂ SO ₄)	Accelerator	--	.75	5.625
* Com. Retarder	Retarder	--	.06	.450
T.P. Blend Talc	Slip Agent	--	5.00	37.500
			100.00	750.000

*Adjust quantity according to set time requirements. Increase amounts for longer working formulas.

WORKING CONSISTENCY - Refer to Plant Testing Procedure No. 32.

<u>Specifications</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
	60	55	58

SETTING TIME - Refer to Plant Testing Procedure No. 6 (slow set)
Specifications Minimum: 1-1/4 hr. Maximum: 1-3/4 hr.

WORKING PROPERTIES - Refer to Plant Testing Procedure No. 33.
Specifications Must be plastic and buttery working; free of grit or coarse particles.

BONDING PROPERTIES - Refer to Plant Testing Procedure No. 35.
Specifications After compound has dried, tape shall delaminate when peeled back.

CRACK RESISTANCE - Refer to Plant Testing Procedure No. 37.
Specifications There shall be no large fissure cracks in the wedge and very few, if any, cracks in the thinner half of the wedge.

-/ denotes change

WNG:elz

SGP 0018391

**ACME FORMULA #993
ASBESTOS CONTAINING PRODUCTS**