



SIMONA

PRODUCT AND MATERIALS GUIDE

SIMONA PMC delivers high-performing products
made by high-performing people.



SIMONA
PMC



PERFORMANCE. SPECIALISTS. SOLUTIONS.

At SIMONA PMC, also known as Premier Material Concepts, we are so much more than just TPO....We also produce ABS, ASA, Acrylic, PE, decorative laminations, a variety of high-performance cap layers, and many more. We believe in going beyond the products and doing more.

Performance - We produce highly engineered thermoformable sheet that will deliver the results you expect from your high-performance finished products. In addition to being ISO certified, we follow strict and extensive guidelines to ensure that our sheet products are of the highest quality and result in peak performance.

Specialists - We pride ourselves on our high-performance products and high-performance people. We believe that hiring the right employees and providing them with the proper training so they can be the best in the industry, is just as important as the products we sell. You can count on SIMONA PMC to listen to your needs and provide customized solutions.

Solutions - Not only do we offer a wide range of products— we bring deep expertise to every project—helping our customers move from concept to creation with confidence. Our team of specialists will pinpoint the right product, work with you to tackle all your tough projects, and stay with you through any hurdles you may encounter along the way. We know the custom thermoforming industry is constantly changing, and so are we.

ABS

Acrylonitrile Butadiene Styrene is a terpolymer alloy that is known for good impact resistance, high stiffness, resistance to creep and processing versatility, which makes it one of the most widely used thermoplastics in the industry.

SIMONA PMC offers a number of ABS options based on desired impact and surface performance. ABS is not inherently weatherable, but can be if one of our weather-resistant cap layers are added.

TYPES

- UV Resistant
- Medium Impact
- Flame Retardant
- High Impact
- Utility
- FDA

HIGH PERFORMANCE CAPS

- ASA (High or Low Gloss)
- Decorative Film
- Acrylic (High or Low Gloss)
- Low Gloss (Not Weatherable)
- Soft Touch
- Anti-Graffiti
- Vinyl

POPULAR APPLICATIONS

- Heavy Truck Cab Interior
- Bath Remodel
- Bus Components
- Electrical Housings
- Automotive Electronics
- Marine Consoles

Co-extruded ABS products come in a variety of colors, textures, and gloss levels.



Through the growth of our manufacturing operations, and acquisition by world leading thermoplastics manufacturer SIMONA, we are proud to offer cutting-edge technologies and services to the markets we serve. We invite you to visit our facilities any time for a guided tour.



SIMORAIL

SIMORAIL is a fully compliant, flame-retardant thermoplastic for railway interiors. SIMORAIL is designed to replace metals and FRP through lower weight, recyclability, and improved aesthetics. Two grades are available depending on the rail standard that needs to be met.

SIMORAIL 130

- Meets North American Standard NFPA 130:
 - Smoke density (ASTM E662)
 - Flame spread (ASTM E162)
 - Toxicity (SMP 800C, BSS 7239)

SIMORAIL HL3

- Meets European Standard EN45545-2:
 - Heat release (ISO 5660-1)
 - Flame spread (ISO 5658-2)
 - Smoke density (ISO 5659-2)
 - Toxicity (ISO 5659-2)

SIMORAIL can be produced in any color and extruded textures, and can be customized by adding recycled content, UV weatherability, anti-graffiti or decorative prints.

POPULAR APPLICATIONS

- North American Rail Interior
- Mass Transit
- European Rail Interior



ONESTEP VINYL/ABS

SIMONA PMC's OneStep Vinyl/ABS products offer a textured, leather-like appearance and a refined feel. While maintaining dependable performance for forming applications, it retains the durability and rigidity to withstand wear and tear. A vinyl foam composite is laminated over ABS to create a piece that mimics hand-wrapped parts and is near impervious to scratches and marring. The mixture of vinyl with ABS does limit the recyclability of this product. Draw ratio should be limited to 2:1 for best results. Contact technical service for detailed thermoforming support.

OneStep is like a high-performance leather. It has a sophisticated look and feel, while also providing the lasting durability required for a high-performance lifestyle.

For an enhanced softer feel, try our NextStep™ product

POPULAR APPLICATIONS

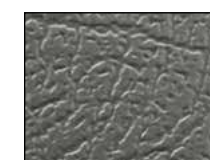
- Van Interior
- Automotive Interior
- ATV Components
- Marine Dashboards
- Recreational Vehicle
- Heavy Truck Interior

***Stock colors subject to change based on demand. Contact your PMC sales person for availability.**

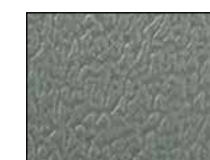
STOCK COLORS



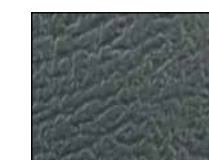
Med. Neutral



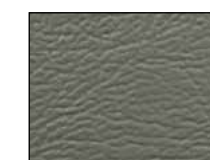
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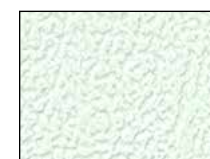
Med. Gray



Dark Portland



Med. Dark Pewter



White



Slate Gray



Black (BS)



Black (FX)



Kanga



PC-ABS

Combining Polycarbonate with ABS results in the best of both worlds. You get the ease of processing ABS and the durability of polycarbonate. This combination also improves heat deflection temperature, stiffness, and impact resistance. It requires a cap or coating for weatherability, but because it is easy to paint and has a high flex modulus, it is always in demand.

PC-ABS saves time and money when compared to using metal by reducing the number of tools needed to process a piece. It's also rigid and tough but still pliable enough to form features that are not possible with metal.

POPULAR APPLICATIONS

- Telecommunications Application
- Electronics
- Structural Parts
- Medical Equipment Housings
- Heavy Truck Fairings

SOFTFLEX ASA/ABS (cap/core)

SoftFlex ASA/ABS is a co-extruded styrenic system that offers the weatherability & chemical resistance of ASA combined with the versatility of ABS. The high elastomer content of the ASA cap provides an ultra low-gloss look and a soft-touch feel that makes it ideal for multiple interior & exterior applications.

Since ASA is compatible with ABS, recycle content is possible without significant loss in performance.

POPULAR APPLICATIONS

- Marine dashes and trim
- Bus interiors
- Exterior Body Panels
- Heavy Truck Bumpers
- Automotive aftermarket parts
- Van conversion interiors

FR PC-ABS

This specific blend of polycarbonate and ABS with fire-retardant additives meets stringent regulations for fire behavior, electrical safety. The sheet has good impact toughness at a wide temperature range, has excellent thermoforming properties, and is easy to machine.

Flame Characteristics

(Based on final part thickness):

UL94V-2

(0.75mm: burning stops within 30 seconds on a vertical specimen)

UL94V-0

(1.5mm: burning stops within 10 seconds on a vertical specimen)

UL94V5VB

(2.0mm: burning stops within 60 seconds on a vertical specimen)

UL94V5VA

(3.0mm: burning stops within 60 seconds on a vertical specimen)

POPULAR APPLICATIONS

- Bus Components
- Electrical Enclosures
- Appliance Parts
- Medical Diagnostic Equipment Covers



TPO

Thermoplastic Polyolefin is a compounded alloy of polypropylene, elastomers, and mineral fillers offering a unique balance of stiffness, low thermal expansion, superior impact, and excellent chemical resistance. TPO has proven weatherability, so in most instances, does not require a weatherable cap. In severe outdoor environments, SIMONA PMC has developed the patented line of PremierCap line of products, so it does not require a cap, and it ranks extremely high on impact and chemical resistance.

SIMONA PMC offers a wide range of different types and combinations of TPO which make us the leading supplier in the industry. Not only does SIMONA PMC produce TPO in custom colors and finishes, we also make specialized grades to satisfy a range of needs.



TYPES

- High Melt Strength
- High Stiffness
- Utility
- Flame Retardant

CAPS

- High or Low Gloss
- Soft-touch TPO (Exultra® 2000)
- PremierCap® (Enhanced Scratch & Mar)
- Decorative Film
- ONTEX® (Directly Bondable/Paintable)

POPULAR APPLICATIONS

- Exterior Panels
- Snowmobile Hoods
- ATV Roofs
- UTV Door Panels
- RV Parts
- Heavy Truck Exterior

TPO is a great replacement for powder coated metal parts due to being lighter weight, more cost-effective, and easier to form.

POLYETHYLENE & TPR*

SIMONA PMC® 400 series of polyethylene products provides a cost-effective and versatile material for various interior and exterior applications. Several grades exist depending on the end use application:

PMC® 410 - HDPE, non-forming

- Cost-effective, high-density polyethylene ideal for wall covering or other non-thermoforming applications
- Flexural Modulus 1,620 Mpa
- Specific Gravity 0.969

PMC® 420 - HDPE, formable

- High-density polyethylene grade for thermoformed applications.
- Flexural Modulus 1,306 Mpa
- Specific Gravity 0.955

PMC® 422 - HMWPE, formable

- High molecular weight polyethylene grade for more complex thermoformed applications requiring additional melt strength
- Flexural modulus 1,207 MPa
- Specific Gravity 0.948

PMC® 413 & 415 TPR Grades

- Flexible high-density polyethylene grades with high elastomer content
- Ideal for non-slip applications or floor mats requiring a high-grip, rubbery feel
- Available in two hardnesses depending on the level of flexibility needed
 - PMC 413 TPR – less flexible grade, best for thermoformed parts, approximately 95 Shore A hardness.
 - PMC 415 TPR – more flexible grade, ideal for floor mat or impact absorption applications.

POPULAR APPLICATIONS

- Wall Panels
- Power Sports Liners and Panels
- Anti-Slip Floor Mats
- Heavy Truck Interiors

*Thermoplastic Rubber

MATERIALS

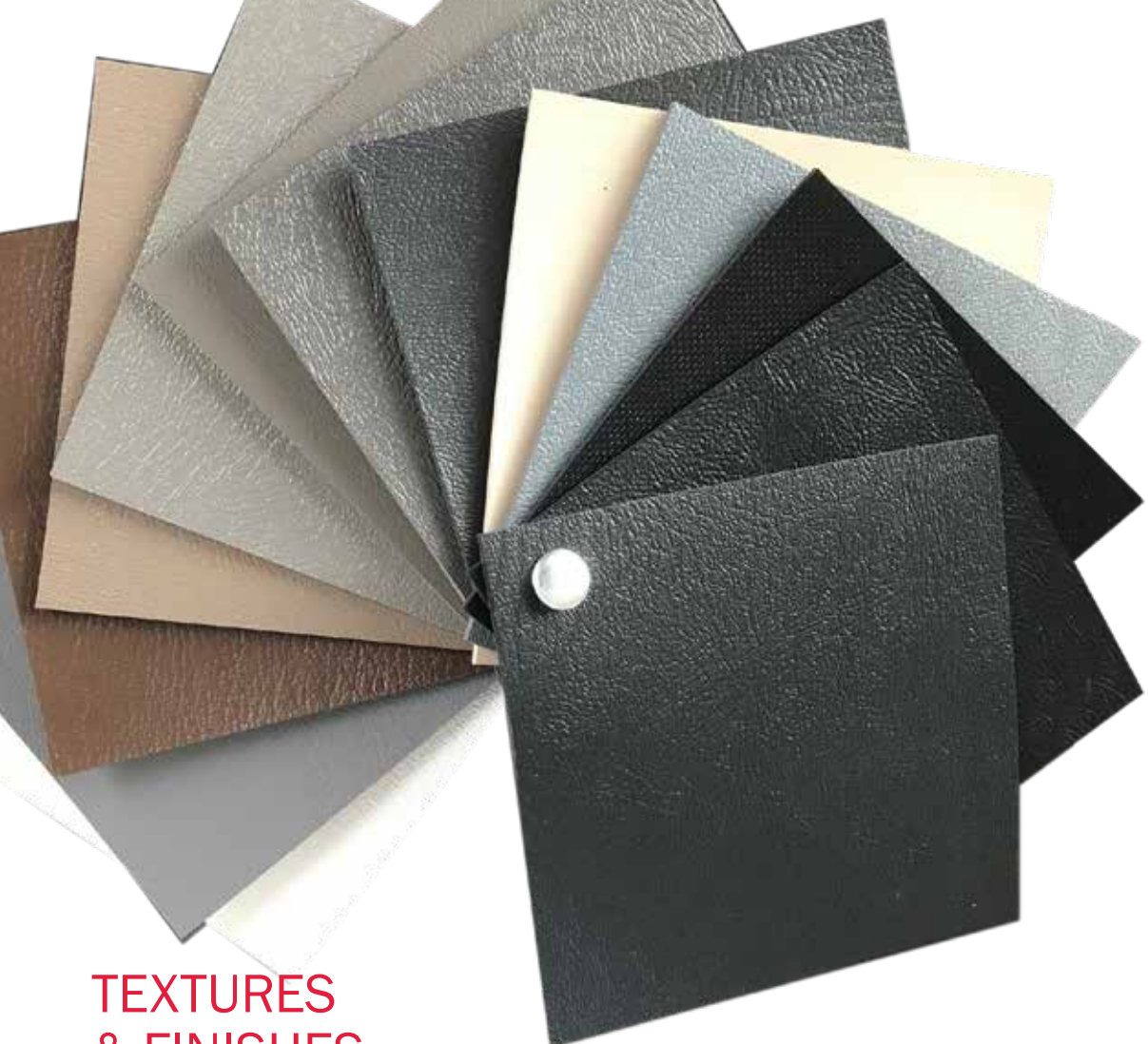


Description	PMC Grade Name	Flexural Modulus (psi)	Tensile Strength (psi)	Notched Izod Impact (ft-lbs./in. @73 °F)	Gardner Impact (in-lbs. @73 °F)	Heat Deflection Temperature (66 psi)	UV Resistant?	Gloss	Flammability
ABS Base Grades									
Utility ABS	PMC® 100	290,000	5,076	5.0	-	190° F	No	Mid	-
Medium Impact ABS	PMC® 200	336,000	6,250	4.6	-	196° F	No	Mid	FMVSS 302
High Impact ABS	PMC® 300	368,000	6,250	8.0	-	203° F	No	Mid	FMVSS 302
FR ABS	PMC® 308	342,201	8,982	3.7	-	200° F	No	Mid	UL V-0 @ 0.060"
ABS Multi-layer grades									
Low Gloss ABS Cap*	PMC® 210	310,526	4,786	-	192	201° F	No	Low	FMVSS 302
Low Gloss Acrylic Cap*	PMC® 1210	374,000	6,048	-	282	205° F	Yes	Low	-
Low Gloss ASA Cap*	PMC® 1220	285,000	5,640	-	320	200° F	Yes	Low	FMVSS 302
Low Gloss Decorative Film*	PMC® 1232	335,000	6,214	4.6	-	196° F	Yes	Low	-
High Gloss Acrylic Cap*	PMC® 1250	374,000	6,300	-	292	205° F	Yes	High	-
High Gloss Decorative Film*	PMC® 1272	335,000	6,214	4.6	-	196° F	Yes	High	-
Anti-Graffiti Cap*	PMC® 1280	336,000	6,580	4.6	-	196° F	Optional	Low	-
High Gloss ASA Cap*	PMC® 1290	285,000	5,640	-	320	200° F	Yes	High	-
SoftFlex® ASA Cap*	SoftFlex® 3200	232,000	4,379	-	320	200° F	Yes	Low	FMVSS 302
OneStep® Vinyl Foam Laminate	OneStep® 4100	379,000	4,046	-	313	205° F	Yes	Low	FMVSS 302
Acrylic Base Grades									
Low Gloss Acrylic Sheet	PMC® 1010	240,000	5,100	1.0	-	200° F	Yes	Low	-
High Gloss Acrylic Sheet	PMC® 1000	260,000	6,000	1.1	-	192° F	Yes	High	-
Granites	PMC® 1010	280,000	5,300	0.7	-	206° F	Yes	Low	-
PC-ABS Base Grades									
PC-ABS	PMC® 905	327,000	7,475	12.0	-	256° F	No	Mid	-
FR PC-ABS	PMC® 908	380,000	7,687	11.0	-	223° F	No	Mid	UL V-0 @ 0.060"
PC-ABS Cap Grades									
Low Gloss Acrylic Cap	PMC® 1915	318,000	7,200	-	-	250° F	Yes	Low	-
Low Gloss ASA Cap	PMC® 1925	328,000	7,500	-	-	248° F	Yes	Low	-
High Gloss Acrylic Cap	PMC® 1955	320,000	7,300	-	-	250° F	Yes	High	-
High Gloss ASA Cap	PMC® 1995	320,000	7,400	-	-	250° F	Yes	High	-

*Capped grades also available over other base grades. Properties listed for medium impact ABS or HMS TPO base in charts above

Description	PMC Grade Name	Flexural Modulus (psi)	Tensile Strength (psi)	Notched Izod Impact (ft-lbs./in. @73 °F)	Gardner Impact (in-lbs. @73 °F)	Heat Deflection Temperature (66 psi)	UV Resistant?	Gloss	Flammability
Rail Interior Grades									
NFPA 130 Rail Interior	SIMORAIL 130	369,913	8,750	12.0	-	209° F	Optional	Low	NFPA 130
EN45545-2 Rail Interior	SIMORAIL HL3	495,676	7,149	2.5	-	212° F	Optional	Low	EN45545-2
PE Base Grades									
Non-Forming HDPE	PMC® 410	234,996	4,424	-	-	125° F	Optional	Mid	-
Thermoforming HDPE Grade	PMC® 420	189,455	4,020	-	-	116° F	Optional	Mid	-
HMWPE	PMC® 422	175,000	3,600	-	-	173° F	Optional	Mid	-
Anti-Slip TPR - Less Flexible	PMC® 413	109,000	1,900	-	-	-	Optional	Mid	-
Anti-Slip TPR - More Flexible	PMC® 415	245,000	3,625	-	-	-	Optional	Mid	-
TPO Base Grades									
Utility TPO	PMC® 500	290,000	3,016	-	322	210° F	Yes	Mid	-
Standard TPO	PMC® 600	275,000	2,900	-	322	212° F	Yes	Mid	FMVSS 302
High Melt Strength TPO	PMC® 700	300,150	3,450	-	322	214° F	Yes	Mid	FMVSS 302
FR TPO	PMC® 703	319,000	2,900	-	-	-	No	Mid	UL V-1 @ 0.118" UL V-0 @ 0.236"
Ultra High Melt Strength TPO	PMC® 705	310,000	3,450	-	320	230° F	Yes	Mid	FMVSS 302
High Stiffness TPO	PMC® 802	570,000	4,400	-	320	240° F	Yes	Mid	-
Glass Filled TPO	PMC® 815	536,000	9,280	40.0	-	293° F	Yes	Mid	FMVSS 302
TPO Multi-layer grades									
High Gloss TPO Cap*	PMC® 750	290,800	3,091	-	320	212° F	Yes	High	-
Low Gloss Enhanced Scratch & Mar Cap*	PremierCap® 1720	282,800	2,740	-	320	211° F	Yes	Low	-
High Gloss Enhanced Scratch & Mar Cap*	PremierCap® 1750	290,800	3,091	-	320	212° F	Yes	High	-
Soft Touch TPE Cap*	Exultra® 2700	250,770	2,918	-	>320	-	Yes	Low	-
Directly Bondable/Paintable Cap*	Ontex® 8700	300,150	3,450	-	320	212° F	No	High	-

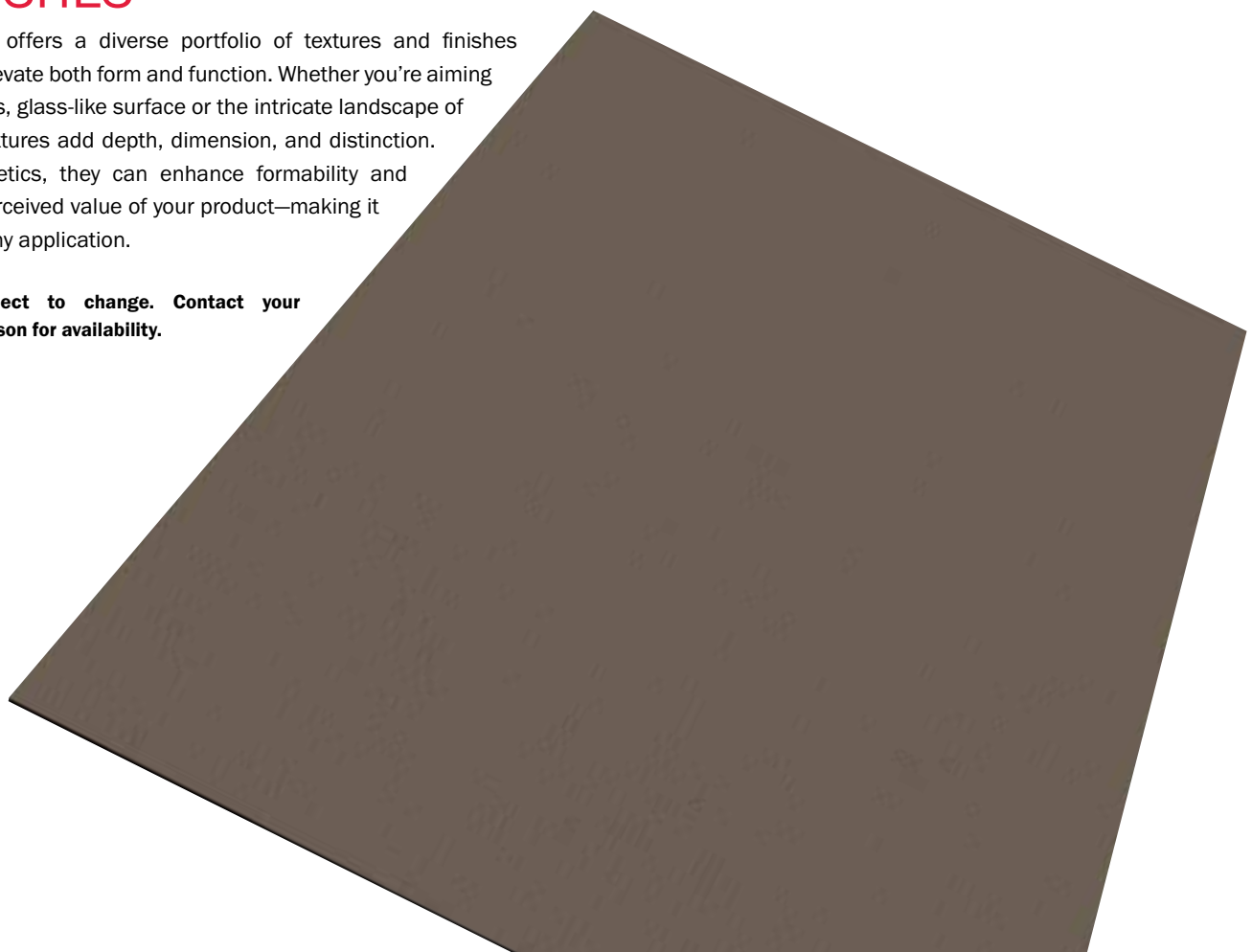
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**TEXTURES
& FINISHES**

SIMONA PMC offers a diverse portfolio of textures and finishes designed to elevate both form and function. Whether you're aiming for a high-gloss, glass-like surface or the intricate landscape of Seville, our textures add depth, dimension, and distinction. Beyond aesthetics, they can enhance formability and elevate the perceived value of your product—making it stand out in any application.

***Textures subject to change. Contact your PMC sales person for availability.**



TEXTURES



FILMS

CUSTOM EXTRUSION SOLUTIONS

ABS | TPO | Acrylic | ASA | PC-ABS | PP | PE | Soft-touch

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LIMITED WARRANTY, WARRANTY DISCLAIMERS AND LIMITATIONS OF REMEDIES AND LIABILITIES.

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