

nienkämper

TANGENT[®] SHELVING



2026

TANGENT® SHELVING



TANGENT® SHELVING

Tangent is an innovative, strong, and graceful shelving system. Tangent is unique because of its beautifully simple means of assembly. When the shelves are eased into their supports, they instantly lock in place. The anodized aluminum supports are so unobtrusive, shelves seem to float.

Tangent has won numerous design awards since its introduction in 1997:

- 1999:** National Post Design Excellence Award
- 1998:** I.D. Annual Design Review Award
- 1998:** NEOCON Gold Award – Best of Show
- 1998:** Best of Canada Award
- 1998:** Good Design Award
- 1998:** NEOCON/IIDEX Canada Gold Award
- 1997:** Virtu 11 Award

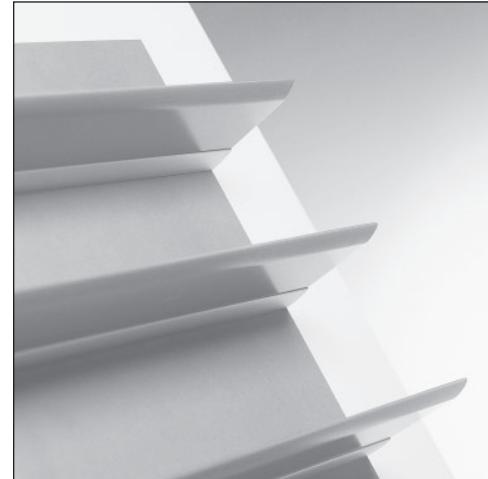
Prices shown are List Prices, FOB our Toronto Factory- freight charges are extra. Packing and/or crating is available, if required, upcharges apply.

TANGENT® SHELVES

Tangent shelves provide a unique and effective shelving solution. Key to the entire system is a strong, wall-mounted aluminum bracket. Along its length is a concealed "tooth" that corresponds to a groove in the bottom of the shelf. Simply ease the shelf into the bracket and rotate downward. The patented tooth and groove design will lock the shelf into place. Maximum shelf load capacity is 20 lbs. per linear foot, meaning a 4' shelf can accommodate up to 80 lbs. distributed evenly across its length. All shelves are available in standard Nienkämper wood veneers and stains. The standard finish for the anodized aluminum bracket is silver. Refer to pages 8 & 12 for wood and aluminum finish options.

	Model Number	L" x D" x H"		List Price
<u>DISPLAY SHELF</u>	29210	36 5 ½ 1 ½		1,125
	29211	48 5 ½ 1 ½		1,275
	29212	60 5 ½ 1 ½		1,430
	29213	72 5 ½ 1 ½		1,600
	29214	84 5 ½ 1 ½		1,760
	29215	96 5 ½ 1 ½		1,905
<u>STRAIGHT SHELF</u>	29220	36 12 ½ 1 ½		1,185
	29221	48 12 ½ 1 ½		1,345
	29222	60 12 ½ 1 ½		1,530
	29223	72 12 ½ 1 ½		1,700
	29224	84 12 ½ 1 ½		1,870
	29225	96 12 ½ 1 ½		2,035
<u>RADIUS SHELF</u>	29230	36 (11) 12 ½ 1 ½		1,380
	29231	48 (11) 12 ½ 1 ½		1,555
	29232	60 (11) 12 ½ 1 ½		1,730
	29233	72 (11) 12 ½ 1 ½		1,925
	29234	84 (11) 12 ½ 1 ½		2,080
	29235	(11) 12 ½ 1 ½		2,260
<u>ASYMMETRICAL SHELF</u>	29240	36 (11) 12 ½ 1 ½		1,380
	29241	48 (11) 12 ½ 1 ½		1,555
	29242	60 (11) 12 ½ 1 ½		1,730
	29243	72 (11) 12 ½ 1 ½		1,925
	29244	84 (11) 12 ½ 1 ½		2,080
	29245	(11) 12 ½ 1 ½		2,260

For installation and assembly see page 301-302.



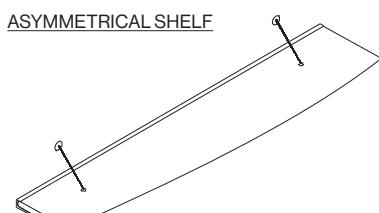
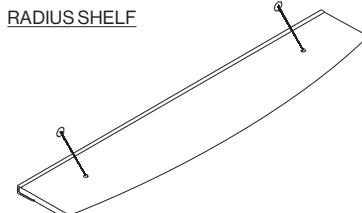
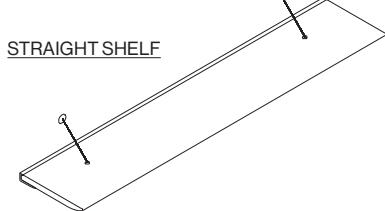
TANGENT® SHELVES WITH WIRE SUPPORT

Tangent shelves provide a unique and effective shelving solution. Key to the entire system is a strong, wall-mounted aluminum bracket. The addition of a diagonal wire support dramatically increases the capacity to carry a load. Once the wire assembly is installed into the wall and the shelf, the shelf is simply rotated into a concealed "tooth" along the aluminum rail that corresponds to a groove in the bottom of the shelf. Exact weight capacity depends on the wall construction and the method of installation. Refer to page 303 for load capacities.

All shelves are available in standard Nienkämper wood veneers and stains. The standard finish for the anodized aluminum bracket is silver. The wire is stainless steel. Refer to pages 8 & 12 for wood and aluminum finish options.

Model Number	L"	x	D"	x	H"	List Price
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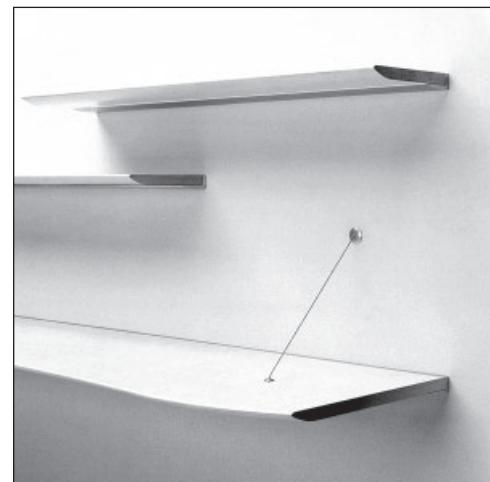
29216	36		12 1/2		1 1/8	2,005
29217	48		12 1/2		1 1/8	2,170
29218	60		12 1/2		1 1/8	2,360
29226	72		12 1/2		1 1/8	2,500
29227	84		12 1/2		1 1/8	2,660
29228	96		12 1/2		1 1/8	2,845



29236	36		(11) 12 1/2		1 1/8	2,185
29237	48		(11) 12 1/2		1 1/8	2,360
29238	60		(11) 12 1/2		1 1/8	2,505
29246	72		(11) 12 1/2		1 1/8	2,720
29247	84		(11) 12 1/2		1 1/8	2,870
29248	96		(11) 12 1/2		1 1/8	3,040

29266	36		(11) 12 1/2		1 1/8	2,185
29267	48		(11) 12 1/2		1 1/8	2,360
29268	60		(11) 12 1/2		1 1/8	2,505
29276	72		(11) 12 1/2		1 1/8	2,720
29277	84		(11) 12 1/2		1 1/8	2,870
29278	96		(11) 12 1/2		1 1/8	3,040

For installation and assembly see page 301-302.



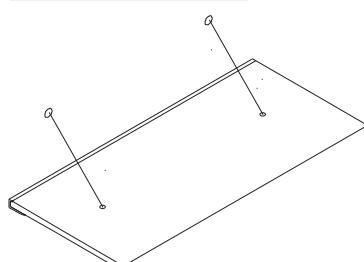
TANGENT® WORK SURFACE

Tangent Work Surfaces provide a unique and effective surface that is considerably deeper than a Tangent Shelf. Great for a small work area where support legs are not an option. Tangent Work Surfaces include a diagonal wire support that allows suspension of the top as well as leveling. Maximum load capacity is 50 lbs. per linear foot. Once the wire assembly is installed into the wall and the work surface, the work surface is simply rotated into a concealed "tooth" along the aluminum rail that corresponds to a groove in the bottom of the shelf. Exact weight capacity depends on the wall construction and the method of installation. Refer to page 317 for load capacities.

All work surfaces are available in standard Nienkämper wood veneers and stains. The standard finish for the anodized aluminum bracket is silver. The wire is stainless steel. Refer to pages 8 & 12 for wood and aluminum finish options.

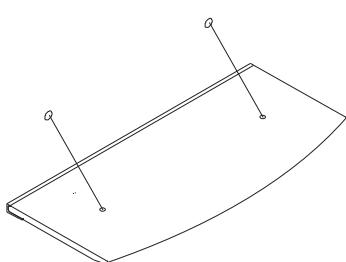
Model Number	L"	x	D"	x	H"	List Price
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STRAIGHT WORK SURFACE



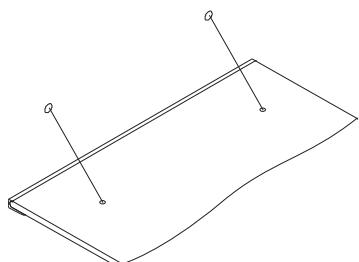
29260	36	22	1 1/8	2,485
29261	48	22	1 1/8	2,770
29262	60	22	1 1/8	3,060
29263	72	22	1 1/8	3,345
29264	84	22	1 1/8	3,610
29265	96	22	1 1/8	3,875

RADIUS WORK SURFACE



29270	36	(20) 22	1 1/8	2,720
29271	48	(20) 22	1 1/8	2,995
29272	60	(20) 22	1 1/8	3,265
29273	72	(20) 22	1 1/8	3,580
29274	84	(20) 22	1 1/8	3,840
29275	96	(20) 22	1 1/8	4,110

WAVE WORK SURFACE



29280	36	(20) 22	1 1/8	2,795
29281	48	(20) 22	1 1/8	3,090
29282	60	(20) 22	1 1/8	3,360
29283	72	(20) 22	1 1/8	3,685
29284	84	(20) 22	1 1/8	3,955
29285	96	(20) 22	1 1/8	4,235

For installation and assembly see page 301-302.

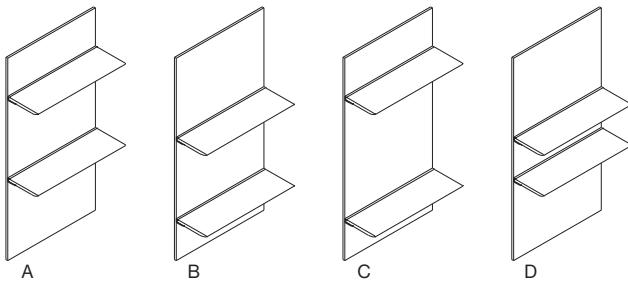


TANGENT® WALL SYSTEM

The Tangent Wall System provides the possibility for creating continuous walls of Tangent shelving. The wall panels come in 3 and 4 foot widths and can be joined in any combination with any number of shelves to create a landscape of shelving. As a boardroom, reception area or private office display or bookcase, the Tangent Wall System offers a wide range of possibilities. Because the reinforced wall is part of the system, this product has extremely high load capacities. When Tangent Wall Systems are combined, Nienkämper will automatically substitute full 6', 7' or 8' continuous shelving elements where possible thereby limiting the number of seams along any given assembly. All wall systems, including shelving, are available in standard Nienkämper wood veneers and stains. The standard finish for the anodized aluminum bracket is silver. Refer to pages 8 & 12 for wood and aluminum finish options.

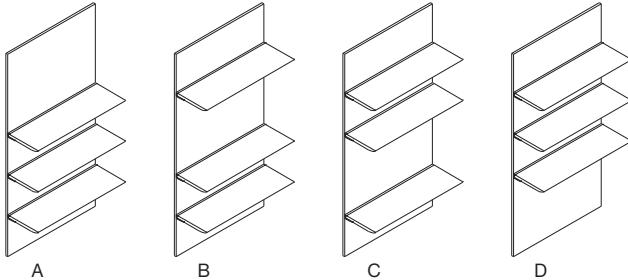
Model Number	L"	x	D"	x	H"	List Price
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TWO SHELF WALL



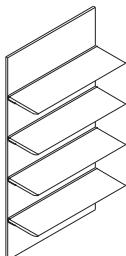
29294-A	36	14	72	4,340
29294-B	36	14	72	4,340
29294-C	36	14	72	4,340
29294-D	36	14	72	4,340
29295-A	48	14	72	5,180
29295-B	48	14	72	5,180
29295-C	48	14	72	5,180
29295-D	48	14	72	5,180

THREE SHELF WALL



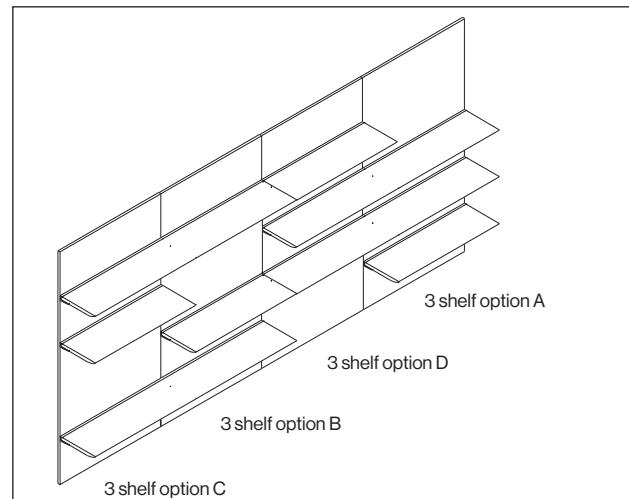
29292-A	36	14	72	5,445
29292-B	36	14	72	5,445
29292-C	36	14	72	5,445
29292-D	36	14	72	5,445
29293-A	48	14	72	6,415
29293-B	48	14	72	6,415
29293-C	48	14	72	6,415
29293-D	48	14	72	6,415

FOUR SHELF WALL



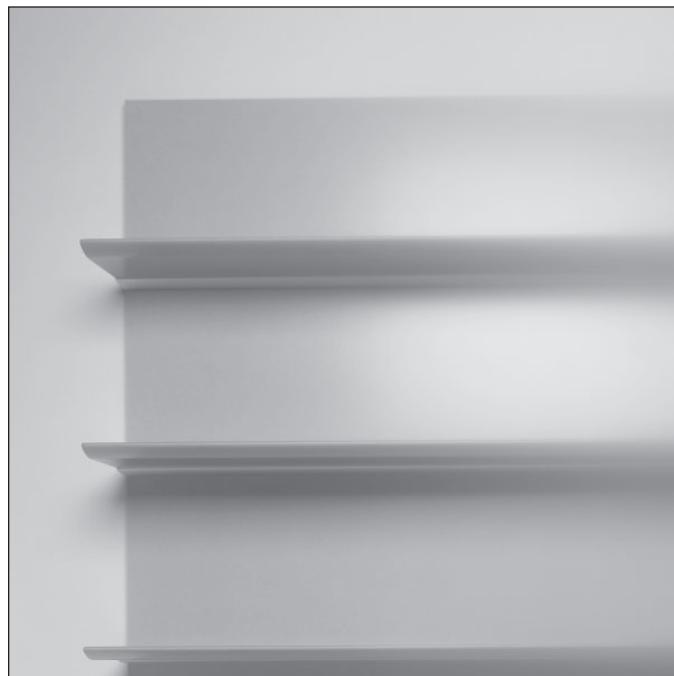
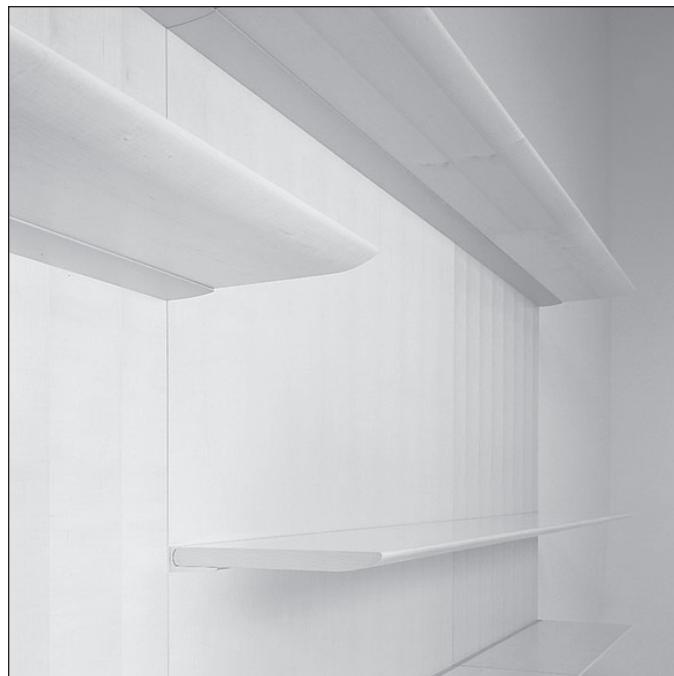
29290	36	14	72	6,505
29291	48	14	72	7,625

Combining elements creates continuous walls, see example below.



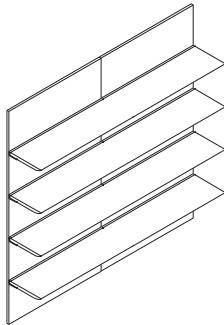
TANGENT® WALL SYSTEM - PHOTOGRAPHS

Tangent Shelves Mounted to Wall System



TANGENT® WALL SYSTEM LAYOUTS

Model Number	Description	List Price
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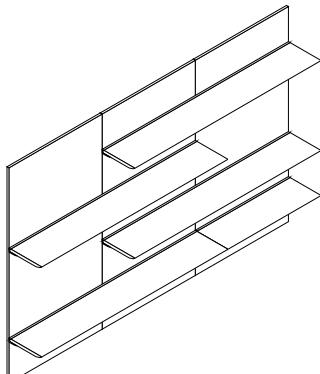


29305

32" of shelving on 8" of wall panels

96" L x 14" D x 72" H

29305/1A All Wood Silver Anodized Shelf Bracket	14,030
29305/3A All Natural MDF Silver Anodized Shelf Bracket	12,015

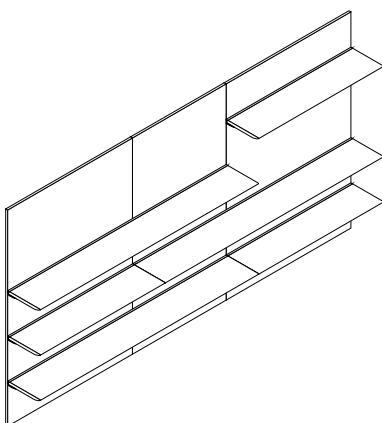


29200

27" of shelving on 9" of wall panels

108" L x 14" D x 72" H

29200/1A All Wood Silver Anodized Shelf Bracket	13,720
29200/3A All Natural MDF Silver Anodized Shelf Bracket	12,270



29203

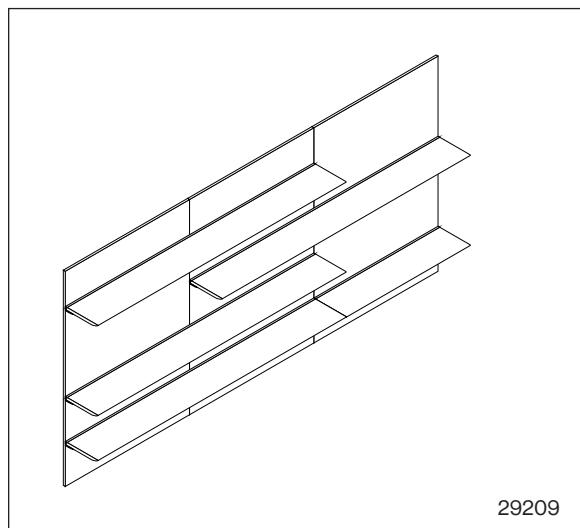
33" of shelving on 11" of wall panels

132" L x 14" D x 72" H

29203/1A All Wood Silver Anodized Shelf Bracket	16,305
29203/3A All Natural MDF Silver Anodized Shelf Bracket	14,240

Note: shelf brackets are available in Silver, Champagne, Light Bronze, Bronze and Black anodized aluminum finishes (see page 12).

TANGENT® WALL SYSTEM LAYOUTS



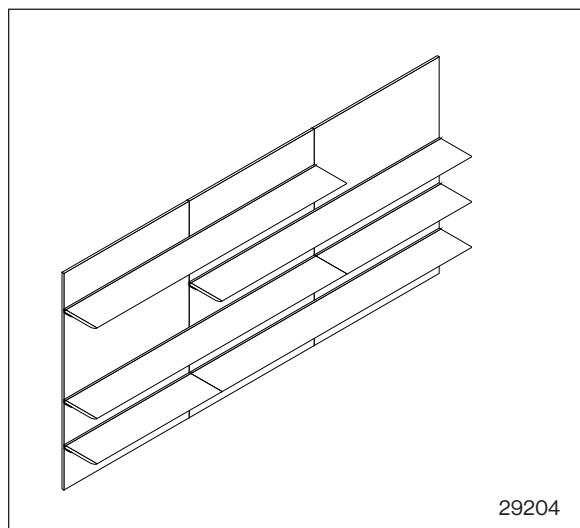
29209

Model Number	Description	List Price
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36" of shelving on 12" of wall panels

144" L x 14" D x 72" H

29209/1A All Wood Silver Anodized Shelf Bracket	16,645
29209/3A All Natural MDF Silver Anodized Shelf Bracket	14,455

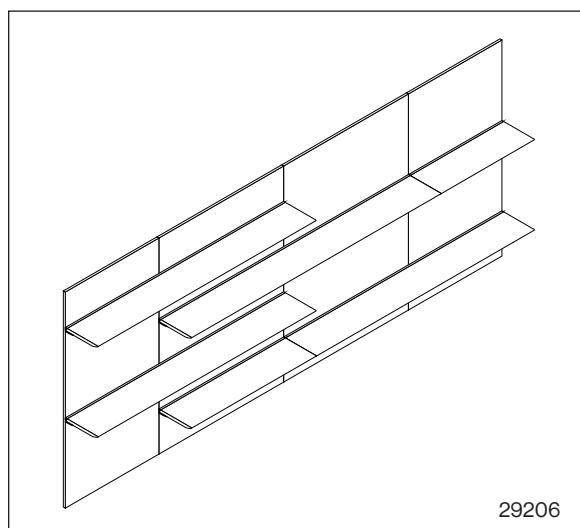


29204

40" of shelving on 12" of wall panels

144" L x 14" D x 72" H

29204/1A All Wood Silver Anodized Shelf Bracket	17,890
29204/3A All Natural MDF Silver Anodized Shelf Bracket	15,480



29206

36" of shelving on 14" of wall panels

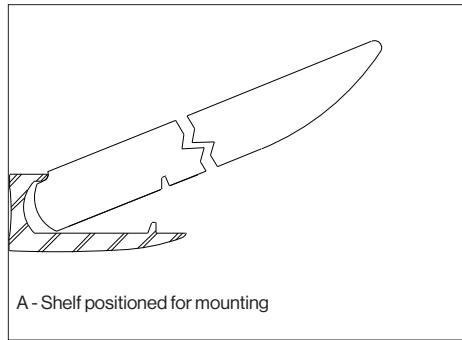
168" L x 14" D x 72" H

29206/1A All Wood Silver Anodized Shelf Bracket	18,915
29206/3A All Natural MDF Silver Anodized Shelf Bracket	16,615

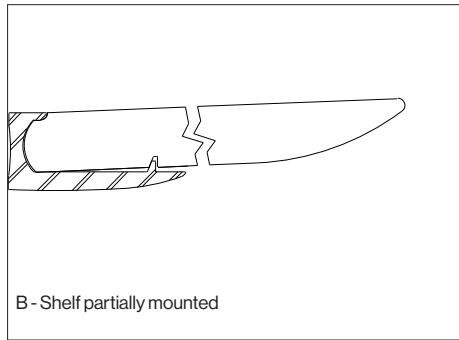
Note: shelf brackets are available in Silver, Champagne, Light Bronze, Bronze and Black anodized finishes.

INSTALLATION

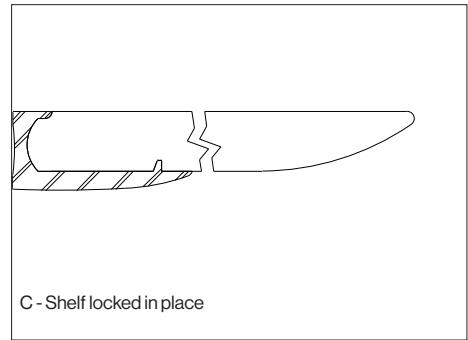
TANGENT® SHELVES



A - Shelf positioned for mounting



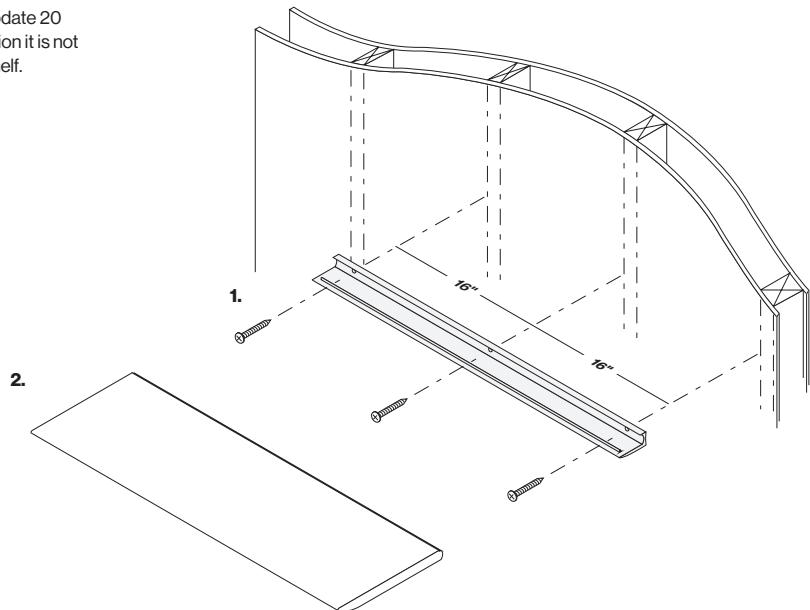
B - Shelf partially mounted



C - Shelf locked in place

IMPORTANT!

This installation method will accommodate 20 lbs. per linear foot load. In this application it is not considered a bookcase but a display shelf.



Installation for wood stud walls

1. Shelving extrusion attaches to wooden wall studs with supplied (2 $\frac{3}{4}$ " #10) wood screws. A 1/8" pilot hole must be drilled before inserting screws.
2. Shelf inserts into extrusion at an angle then drops into position, see drawings A - C.

Installation for metal stud walls

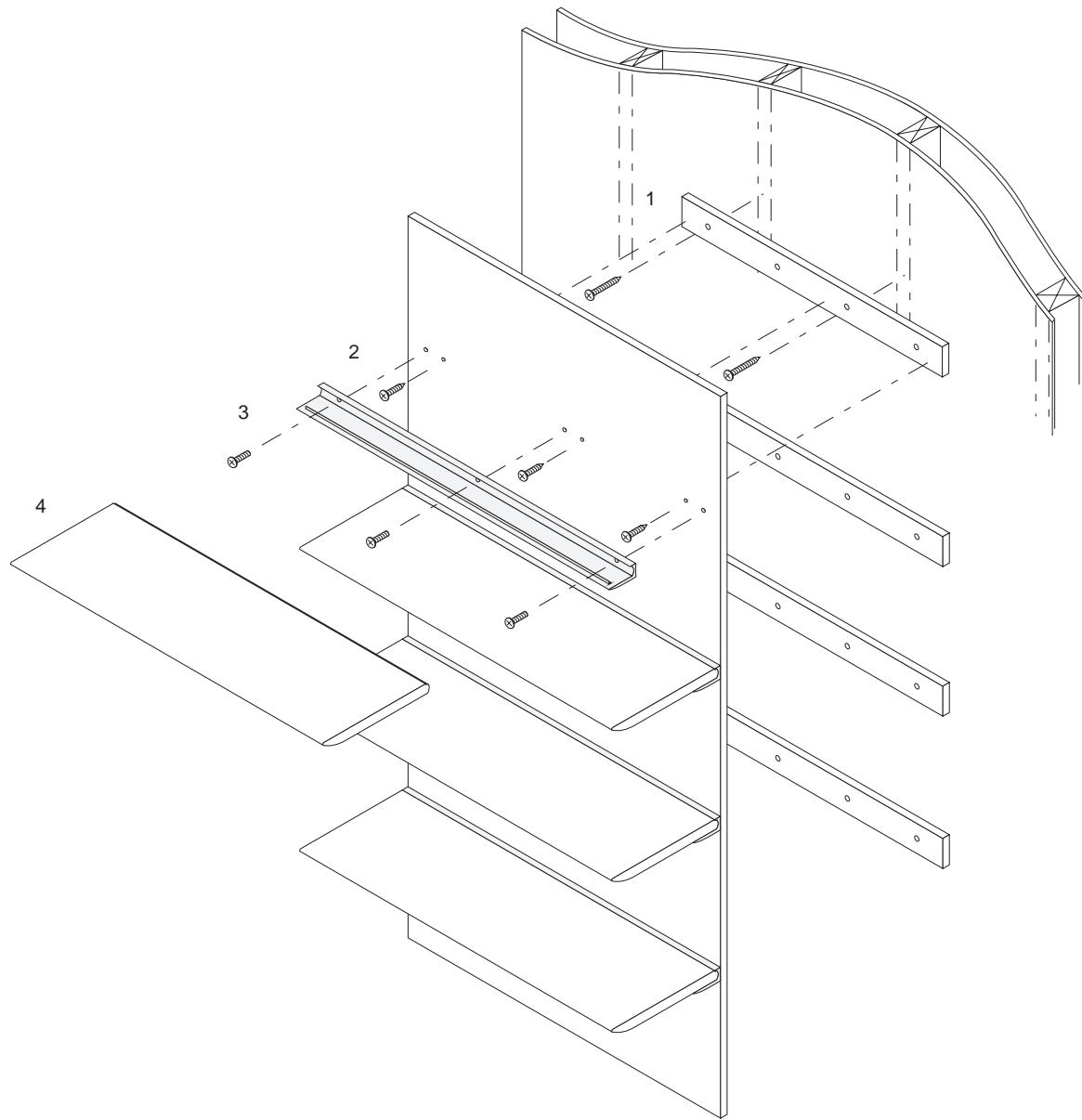
1. Shelving extrusion attaches through drywall to plywood blocking with supplied (1 $\frac{3}{4}$ " #10) Torx head wood screws.
2. Shelf inserts into extrusion at an angle then drops into position, see drawings A - C.

Important!

For best results, plywood blocking is recommended for new construction.

INSTALLATION

TANGENT® SHELVES



Installation for wood stud walls

1. 3/4" plywood blocking attaches to drywall and wooden studs with supplied (2 3/4" #10) wood screws.
2. Shelving panel attaches to wood strips with supplied (1 3/4" #10) wood screws.
3. Shelving extrusion attaches into pre-installed T-nuts in shelving panel with supplied (10 - 24 x 7/8") Allen head machine screws (for best results, these machine screws should be re-torqued after 60 minutes).
4. Shelf inserts into extrusion at an angle then drops into position.
See drawings A - C on page 315.

Installation for metal stud walls

1. 3/4" plywood strips attach to drywall and metal studs with panel adhesive and drywall screws.
2. Panel attaches to wood blocking with supplied (1 3/4" #10) wood screws.
3. Shelving extrusion attaches into pre installed T-nuts in panel with supplied (10 - 24 x 7/8") Allen head machine screws (for best results, these machine screws should be re-torqued after 60 minutes).
4. Shelf inserts into extrusion at an angle then drops into position.
See drawings A - C on page 315.

Important!

For best results, plywood blocking is recommended for new construction.

RECOMMENDED LOAD CAPACITIES

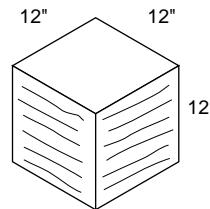
TANGENT®

The following information was gathered through a sequence of engineered tests to determine the static loads for shelving in this price guide. These tests establish capacity for shelving, given a complete and competent installation as outlined on pages 315-316.

General commercial building codes require wall construction to be no less than steel studding at 24" centers.

To achieve best results in new construction, 3/4" thick fir plywood blocking should be installed between these metal studs.

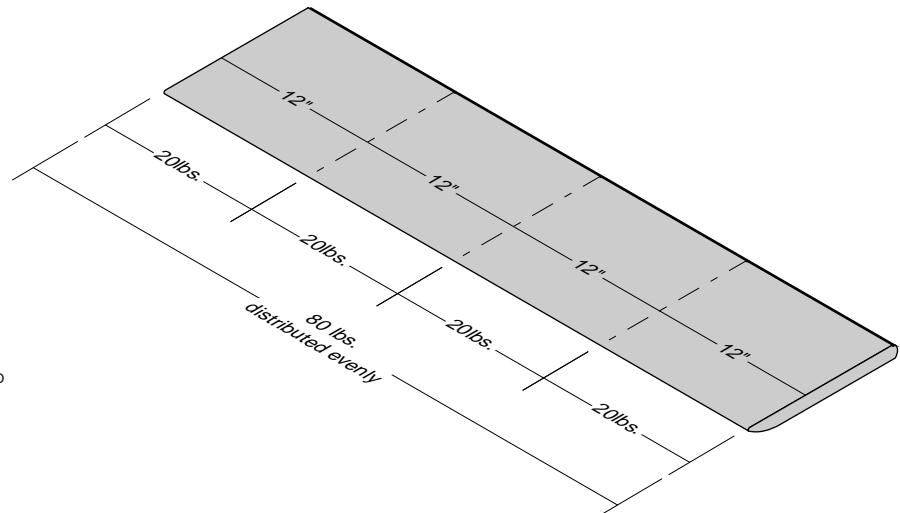
For your reference



1 cubic foot of printer paper weighs approximately 48 lbs.

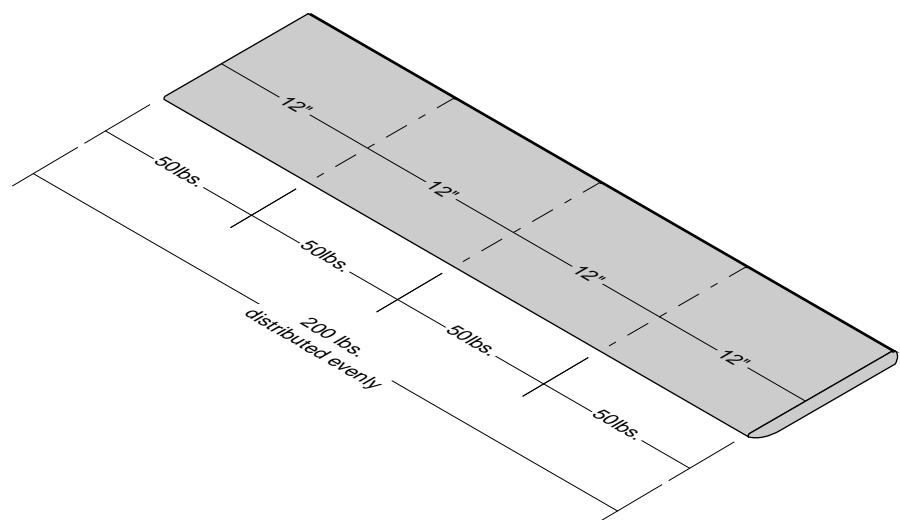
MAXIMUM SHELF LOAD CAPACITY

The maximum load capacity for a properly mounted shelf bracket and shelf is 20 lbs. per linear foot. Adding a diagonal wire support substantially increases the capacity of the shelf.



MAXIMUM WALL/SYSTEM WORK SURFACE LOAD CAPACITY

The maximum load capacity for a shelf properly mounted to a wall system is 50 lbs. per linear foot, meaning a 4' shelf can hold up to 200 lbs. distributed evenly across the shelf.



GLASS WALL BOARD

Model Number	L" x D" x H"	List Price	Product Description
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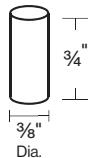
GLASS WALL BOARD



52021	47 $\frac{1}{16}$	$\frac{3}{4}$	43$\frac{1}{4}$	3,985
52022	57 $\frac{1}{2}$	$\frac{3}{4}$	43 $\frac{1}{4}$	4,680
52023	76 $\frac{1}{2}$	$\frac{3}{4}$	43$\frac{1}{4}$	5,965

The Glass Wall Board is low-iron tempered glass back painted white, with silver anodized aluminum low profile trim. Integrated wall cleat mounts tight to wall with no gap. The surface is both dry-marker erasable and magnetic.

GLASS WALL BOARD MAGNETS



52024	145
Set of 4	

- Magnets are particularly strong and specifically for glass wall boards.
- Chrome finish

TERMS AND CONDITIONS OF SALE

PRICES

All prices are list prices, FOB our Toronto Factory- freight charges are extra. Packing and/ or crating is available, if required, upcharges apply.

Due to existing conditions in regard to cost of labor and materials, we reserve the right to change prices without notice.

TERMS

Net 30 days from date of invoice to accredited buyers. Two per cent (2%) interest charged monthly on overdue accounts. Deposit of 50% is required with order. Terms will be established upon credit evaluation. Due to delays in processing references, first orders may be treated as C.B.D. orders.

ORDER CONFIRMATION

Orders are accepted upon issuance of our order confirmation and are subject to the terms set forth therein; notwithstanding any variance from the terms of the buyer's order form.

Nienkämper is not liable for any delay or failure to deliver caused by labor or transportation difficulties, accidents, acts of God, failure of sources of supply, or other causes beyond our control, and changes will affect the delivery date.

CHANGE OF ORDERS OR CANCELLATIONS

Changes or cancellations are subject to our ability to conform. A charge will be levied against canceled or changed orders based on costs already incurred by Nienkämper. All changes must be in writing and submitted on a revised purchase order. Changes will affect the delivery date.

STORAGE

If goods cannot be accepted when ready, we may transfer them to storage (which is to be deemed as delivery for invoice purposes). The customer accepts risks and will be charged at prevailing rates.

FREIGHT

All prices are list prices, FOB our Toronto Factory- freight charges are extra.

Packing and/ or crating are available, if required, upcharges apply.

CLAIMS

All furniture is given to the carrier and signed for in good condition. It is the responsibility of the receiver to sign for the goods in the presence of the carrier and note the condition in which they are received. Freight claims should be filed with the carrier.

WARRANTY

There are no express or implied warranties, conditions and obligations of the manufacturer, whether statutory or otherwise that extend beyond the description on the face hereof. Our furniture is made to the highest standard and is warranted free from defects of material and workmanship for five years from the date of delivery. During the warranty period we will repair or replace such merchandise as shall prove to be defective, during normal usage in accordance with manufacturer's specifications. The manufacturer shall not be liable for defect wholly attributable to normal manufacturing process. Replacement or repair of the Product shall be the sole remedy of the Customer, and the manufacturer shall not be liable for any direct, indirect, incidental, or consequential loss or damage suffered by the Customer by reason of any defect in workmanship or manufacture of the Product or inability to use the Product. Moreover, this warranty does not cover accidental damage, abuse, alteration, ordinary wear and tear of Goods, negligence and misuse nor variations over which we have no control such as heat or humidity or damage to which the Goods are connected that is not attributable to the failure of the goods themselves. This warranty is null and void when the product is installed with hardware other than that supplied and/ or when installed differently than recommended in the installation guide. Modification to the product or hardware may result in failure of the product and cause damage and/ or injury.

WOOD FINISHES

Nienkämper offers a wide variety of standard light finishes on cherry, mahogany and figured anagre wood veneers, and a clear natural finish on figured anagre, figured sycamore, maple, bird's eye maple and curly maple.

Light finishes do not mask the grain and other characteristics of each wood species. It is important to understand that pieces of the same type of wood will not look identical when a light finish is used. The appearance of the finish will also depend on the natural color of the veneer. Cherry darkens over time as the wood ages. Pin knots and gum pockets are inherent traits.

Wood is a naturally variable raw material; its variances are not within the furniture manufacturer's control and are therefore not considered defects under this warranty.