



## **CABINET VISION**

The complete solution for the casegoods industry



### **Design | Present | Manufacture**

### Flexible choice of easy-to-use modular features

CABINET VISION makes it simple for furniture, woodworking, or casegood manufacturers of all sizes to play to their strengths, by using a single, fully modular software package to go from design to manufacture.

With CABINET VISION you buy only the features you need. This allows you to evolve and grow your software usage in line with your business, making CABINET VISION highly scalable and cost-effective.

Enhanced usability makes it even easier to visualize and efficiently perform a full range of tasks, while responding to changing design requirements, whether making high-end custom pieces or basic elements.

Fast, practical and precise, CABINET VISION excels at rapidly and seamlessly converting designs into all the information you need on the factory floor to manage the manufacturing process. And an intuitively simple parametric function means you can capitalize on previous custom designs by resizing elements without reprogramming. The result is a faithful reproduction of designs and the reduction of both time-consuming processes and human error.

CABINET VISION also enables you to support sales with features that include the production of professional reports that help customers understand and visualize the scope of services as well as the end product.

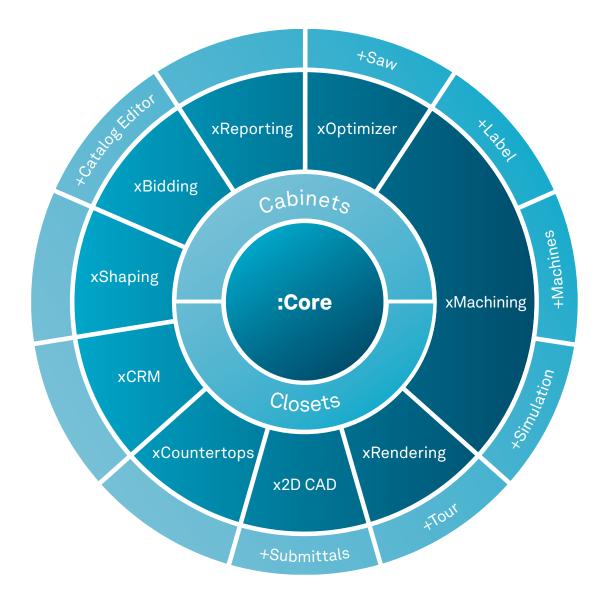


## The building blocks of a successful woodworking business

CABINET VISION provides you with a choice of core components that enable you to enhance productivity and improve quality and customer service within your chosen specialty. Each core component provides layout, cut listing, basic rendering and primary estimating functions.

Once you have chosen the core package that suits your needs, you can then opt to add specific modules, known as multipliers, in line with your individual manufacturing processes, business focus, customer requirements and employee growth plans.

Further additions are also available to enhance the capability of each multiplier, depending on the depth of functionality you seek.



## **Core Cabinets**



### The industry standard in cabinet engineering

Core Cabinets is one of the central components of CABINET VISION. Intuitively easy-to-use, it allows you to create on-screen three-dimensional presentations of the final product while simultaneously generating the necessary production information for the shop floor.

Core Cabinets integrates 3D renderings, material requirements, assembly sheets and cutlists in a single system, so you can stay competitive by quickly and accurately estimating the cost of every job and keeping track of expenditure. Core Cabinets automatically updates manufacturing operations following any changes to design, thereby saving you time and increasing accuracy. It also lets you create professional reports, designs and renderings to share with your customers. Whether manufacturing cabinetry for residential or commercial customers, or creating furniture casegoods, Core Cabinets has everything to define the engineering of your cabinetry.



- Define cabinet construction methods
- Custom cabinet catalog assemblies
- Order entry, floor plan, elevations, 3D and assembly views
- Straight, angled, curved, cathedral, vaulted and peninsula walls
- Import 3D models for materials

- Custom molding and molding set materials
- Basic job costing
- Simple renders
- Assembly, wall elevation and part sheets
- User defined object intelligence
- User created standards

## **Core Closets**

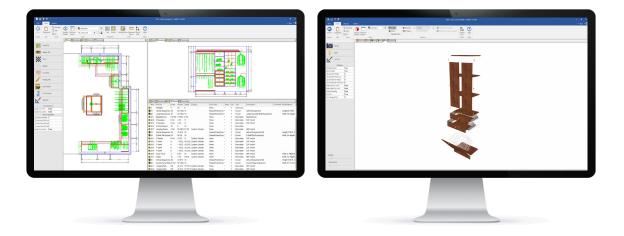


## Outperform the competition when engineering closets

Core Closets is a core element of CABINET VISION, providing you with all the essential tools for manufacturing closets. Designed for ease-of-use, Core Closets enables the creation of on-screen three-dimensional presentations of the final product while at the same time generating the production information required on the shop floor. Core Closets integrates 3D renderings, material requirements, assembly sheets and cutlists in a single system. It helps make you more competitive by quickly and accurately estimating the cost of every job and keeping track of expenditure. Core Closets also automatically updates manufacturing operations following any changes to design, thereby saving time and increasing accuracy. And with Core Closets it is easy to create professional reports, designs and renderings to share with your customers.

### Assembly Manager for closets

To accommodate for the unique manufacturing methods of the closet/storage industry, Assembly Manager allows you to assign closet specific machining, sizing, placement and rules for components such as shoe sections, closet rods, shoe shelves and much more.



#### **Key Features**

- Define closet construction methods
- Custom closet catalog assemblies
- Order entry, floor plan, elevations, 3D and assembly views
- Straight, angled, curved, cathedral, vaulted and peninsula walls
- Import 3D models for materials

- Custom molding and molding set materials
- Basic job costing
- Simple renders
- Assembly, wall elevation and part sheets
- User defined object intelligence
- User created standards

5

## **CABINET VISION Design**

### The ultimate custom showroom design tool

CABINET VISION Design supports sales and profitability by creating professional, accurate designs, renderings and pricing estimates. Its interface is easy to use for both simple and complex projects, enabling designers to give customers a true representation of the look and cost of the finished product. CABINET VISION Design comes in three possible configurations, cabinets, closets, or both and lets you draw on a smart catalog of products and objects so you can consistently design to manufacturers' standards.



- Order entry, floor plan, elevations, 3D and assembly views
- Straight, angled, curved, cathedral, vaulted and peninsula walls
- Import and export orders (CSV, ORD, ORDx)
- Job costing
- Full rendering (photorealistic, cartoon, hand drawn and hatch)
- Basic 2D CAD
- Choose between cabinets or closets, or both



## x2D CAD

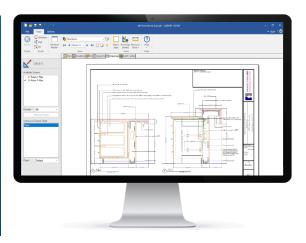


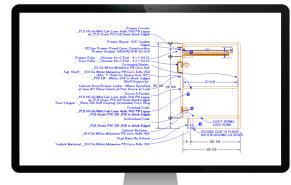
## 2D CAD functionality ideal for architectural submittals and shop drawings

Creating accurately annotated drawings with the x2D CAD multiplier makes it simpler to communicate design intent to architects and contractors. x2D CAD comes with a host of tools and capabilities, including the automatic updating of part information from the live drawing.

#### **Key Features**

- Plan and assembly cross section views
- Custom view layers and dimensions styles
- Save drawing scenes to a separate file
- Live drawing scenes
- User defined drawing library
- Assembly leaders
- Flip, mirror, rotate and trim 2D CAD objects
- Scale and stretch 2D CAD objects
- Offset CAD objects
- CAD saved with assemblies
- Create live data tables





#### +Submittals

Commercial caseworks manufacturers can also choose the +Submittals addition to facilitate the submittal of drawings. +Submittals reduces entry work by deploying deeper text automation to expedite CAD communications It also provides multiple pre-formatted, intelligent objects and assemblies that can be created without any advanced editing experience in CABINET VISION.



## xBidding



## Complete control over bidding and estimation

The xBidding multiplier is a simple yet powerful tool that accurately generates bid data so that you can put forward bids that are both competitive and profitable. xBidding performs a complex calculation based on the material, labor and other costs of the final engineered product, thereby giving you a clear indication of your room for negotiation on price. The smart bidding system also makes it easy to discuss design changes with customers without having to recalculate bids from scratch.

#### **Key Features**

- Full job costing
- Custom labor costing
- Labor per part & assembly
- Price by part
- Define part pricing matrices
- Create and assign vendors to materials
- Access to over 150 bid methods
- Breakout bids by room
- Custom reporting engine
- Export bid data for third party software

		Tan Constant (10)	ings SSM Center	
	Catalogi	10 to information		
-		B- P Delivery	\$642.01	
티민	Sinple Reports	🖞 📌 Delvery	\$642.01	
20		-# Flat Rule: 475.00	\$475.00	
FECT			8114.00	
121-1	Advanced Reports	- 10 9 % Tax	\$53.01	
		8- P Dekxe Cabinets	66.125.60	
	Graph	🙃 📌 Base Cabinets	\$3,959.00	
		- 105.00 x 15 Lin Ft Base	\$2,475.00	
		24 % Mailup	\$594.00	
Deposit		Upper Cabinets	\$3,056.60	
	\$1,050.00	- 2 145.00 x 17 Lin Ft Upper	82,465.00	
	\$1471.06	-0 24 % Markup	8591.60	
Polic	\$1471.00	8- P Installation D- P Stein Finish	5542.04 5110.79	
Malup	24	D- P Stain Finds	5110.79 523.63	
		- + 1.40 x 15.83 Soft Fin Area	\$23.11	
		0 35 % Manup	\$4.3.11 \$8.32	
-501	50%	7 % Tax	10 J2	
		- Sealer	428.33	
		123 x 15.83 SoFt Fin Arra	\$19.47	
			\$7.01	
		- 1 % Tax	\$1.85	
		O 🚯 Top Coat	HILD	
		2 12 X 15 83 SUFTFINAME	\$33.59	
		0 25 % Martuo	\$12.08	
		- 100 7 % Tax	\$3.19	
		g- 📌 Sub-Tops for Stone	\$158.39	
		th 🕜 Total	\$7,692,63	

#### +Catalog Editor

The +Catalog Editor addition allows CABINET VISION users to create their own modular catalog. Modular catalogs have pre-set options and option up-charges, door styles and door/drawer up-charges that match those included in a typical stock manufacturer's paper catalog. These catalogs incorporate all customized system standards from CABINET VISION, including materials, material schedules, doors and drawers, profiles, construction methods and part pricing (if applicable) into a new, distributable catalog. Distributable (or read only) catalogs protect your catalog data so that units cannot be modified and saved back into the catalog after it is distributed to end-users.



## xCountertops



### Making countertop construction part of a seamless manufacturing process

The xCountertop multiplier is fully integrated with CABINET VISION, making it possible for you to configure countertop construction with the same Assembly Manager interface used for cabinets, closets, and drawers. xCountertop calculates cut lists for countertops, automatically updates manufacturing operations with changes made in design and makes it easy to configure build-up, draw-bolts, dog bones, alignment boring and other machining on your countertops. All while giving you a clear overview of costs.

Contraction   Contraction		
Processor Processor Constrained   Processor Processor Constrained   Processor Schedule Schedule	GV Assembly Manager	? X
And the Copy Reset Dates Restored Colling and A		
Status 20	Return New Copy Rename Delete Parameters Conditions	
Maneta  Agence tests Sorring	Home Schedule	Tools
Buddy Buddy Agenetities Jorng	chula v	Schedule #20
C Grost		
		OK Cancel

- Define countertop construction methods
- Specify countertop joint machining (tite joints/alignment boring)
- Modify sink/cooktop cut-outs
- Countertop modifications



## xCRM



## Managing business seamlessly with customers, suppliers and contractors

The xCRM multiplier makes it easy for you to create and manage your customer contact lists and related jobs. With xCRM it is simple to seamlessly track revisions to customers' jobs, ensuring final products accurately match your customers' expectations while saving time on searches. xCRM's centralized interface allows you and your team to view and access the CABINET VISION jobs you are currently working on so you can deliver projects on time. It is also a powerful tool for sub-contractors who need to track and deliver multiple projects for contractors.

- Manage jobs by designer/engineer
- Manage jobs by customer
- Contact management (suppliers, customers, vendors, contractors)
- Contact reports
- Job revision tracking



## xMachining



By automatically producing machine ready G-Code for a wide variety of CNC machinery, xMachining takes designs straight from Screen to Machine<sup>™</sup>

xMachining is the most flexible, powerful and automated CNC software in the woodworking market. Operating with a full range of machines, including CNC routers, drill and dowel, chop saws, panel saws, haunching machines and edgebanders. xMachining has the capability to intelligently program machinery by analyzing part geometry and automatically creating toolpaths, choosing the right tool, and selecting the speed and feed rates. And if you use multiple types of CNC machinery you can rely on xMachining to automate workflows and send the right part, to the right machine, at the right time.

#### **Key Features**

- Output to multiple NC and CNC machines simultaneously
- Integrated reporting (including basic part labels)
- Import custom layered DXFs
- Edit part shapes and add operations
- Advanced tool selection logic
- Automatic tooling and toolpath generation
- Basic toolpath simulation
- Pocket waste away

1012104														• ×
File Main Utilities					_								^	9/6 * 6
G 🚺 🔁 1	T F 4	Ac	-	<b>B</b>	ଚ									
Arturn Parts Materials	let Machine Teo	al import S2M for	Pert.	inport	Help									
Hane View	umns Cataloos	DIF ALPHICAN			Hele .									
Page Ves		dian 100 100 Accord												
		escription	With	Length		Cablio	Material	Les.	Randing	lignore Grain		CNC Machine		
- Colorison Presenters		rescription Infinished Left Fed	23.54	34 1/2		3		Job Job #1 - Defai		Ignore orain	oprisionine	CNC Machine	DED Machine	Crimpo.
<b></b> 2		infinished Left End Infinished Right End	23 14	34 1/2		3	314 2s Birth Ply 314 2s Birth Ply	Job #1 - Defai		DNo DNo				
Add Officum		Infinished Roght Lind	20.14	29.34		3	314 23 EVON PTV 114 28 EVON PTV	Job #1 - Detail						
Ш.		Laler	4	27 12		2	314 24 Birth Ply	Job #1 - Detail		CNO				
T Belas		te Shikher	1	27 10		3	34 2s Broh Ply	Job #1 - Defa		CNv CNv				
A concer		te Shekher	4	27 10		3	34 2s Brob Ply	Job #1 - Defin		CNo				
		eck	23	27 1/2	0	3	314 2s Birth Ply	Job #1 - Defai		DNO				
Collice		tost Toe	4.34	30	0	3	314 2s Oak Pty	Job #1 - Defai		The				
Machine Selo		interest Stretister	4	27 10	0	3	315 2x Birth Ptv	Job #1 - Defai	00001	CIN0				
Manual Yes	81 1 8	intern Rail	112	27	0	3	34 Sold Cak	Job #1 - Defa	4000	CNo				
Badw Set No.	2L 1 8	Ight Stile	112	20.102	0	2	314 Solid Oak	Job #1 - Dofa	44044	CNo.				
SawSet No	21 1 1	to Rail	112	27	0	3	314 Golid Oak	Job #1 - Defai	40000	DNo				
Primary Machine	81.1.0	eff 55/e	112	30.102	0	3	314 Solid Oak	Joo #1 - Defai	****	DN0				
Machine Next Router	SL 1 0	loor Stab	28	612	0	3	314 2s Oak Ptr	Job #1 - Defai	41000	CTH0				
Secondary Machine	5 1 0	argument Box Boldoms	25	19	0	3	114 1s Melamine	Job #1 - Defa	00000	CNo				
Machine Path Router	1. 1 0	rawer Dox Side	3	20	0	3	1/2 2s Melamine	Job #1 - Defai	40001	(INo				
Predand No	51. 1 0	rawer Dox Side	э	20	0	3	1/2 2s Melamine	Job #1 - Defai	4000	(No				
Dull and Dovel Machine		Vawer Box Back	3	25	0	3	10225 Melamine	Job #1 - Defai	410001	CIN0				
Machine Dill and Dovel		vawer Box Sub Front	3	25	0	3	10225 Melamine	366 #1 - Defai	410000	0140				
Pedand No		id Rail	112	27		3	314 Solid Oak	Job #1 - Defai	222241	DNo				
Dice Sav Machine Dice Sav		loor Slab	1370	2212		3	34 2s Oak Ply	Job #1 - Defai	499991	DNo.				
Cheb 294		loor Slab	1370	22 1/2		3	34 2s Oak Ply	Job #1 - Defai		CNo				
		Infinished Left End	23 14	34 1/2		2	3H 2s Birch Pty	Job #1 - Defai		CIN0				
		Infinished Right End	23.14	34.12		2	314 2s Birth Ply	Job #1 - Defar		0140				
	🎭 L 1 U	Infinished Back	28 3/4	29 34	0	2	114 2s Birth Ply	Job #1 - Defar	40000	DNo .				

#### +Label

Ideal for nested-based manufacturing as well as traditional manual and NC panel saws, the +Label addition enables saw and CNC operators to clearly visualize the panel as labels are printed on-demand and placed on parts. You can easily select parts by simply touching the screen and print easy-to-read graphic labels for each part. In addition, the screen is updated automatically to show exactly which parts and panels have been completed.

Full label design capabilities give complete control over the data printed on the label. +Label works in conjunction with xMachining to add bar-codes to each part that requires secondary machining (for example, with a point-to-point or CNC drill and dowel machine), enabling an easy flow from one process to the next.



Many newer generation CNC routers and NC saws include their own on-board realtime labeling solutions. Therefore the +Label addition also allows you to design part labels inside xMachining, using all available information, including an image of the part. These labels are then converted to image files which can be printed in real-time using the CNC router's and/or the saw's built-in labeling system.

#### 14 Manufacturing Intelligence hexagonmi.com | cabinetvision.com

#### +Simulation

+Simulation enables you to preview machine operations graphically on screen to ensure that parts will be machined properly. By simulating prior to machining, it can reduce errors and scrapped parts, saving time, materials, and money.

#### +3rd Party CAD Import

The +3rd Party CAD Import addition makes it possible to import cut lists from third party CAD software and layered DXF files to define CNC machining.

#### +3rd Party CAM

Interoperability is further strengthened with the +3rd Party CAM addition. This provides the ability to export DXF and other popular formats common to CAM applications for further processing by a third-party CAM solution.

#### +Chop Saw

With the +Chop Saw addition it is simple to export data to automated fence systems for chop saws.

#### +Drill & Dowel

The +Drill & Dowel addition gives you the capability to export information to drill and dowel machines.

#### +Material Handling

The +Material Handling addition provides the capability to export to and synchronize materials with material handling systems.

#### +Point to Point

The +Point to Point addition includes either DXF Output to 3rd party CAM applications or the ability to communicate directly with a CNC Machine using Screen to Machine™ technology from Hexagon's Manufacturing Intelligence division.

#### +Router

The +Router addition makes it easy to nest full sheets of parts including operations such as line boring, dados and drawer guide holes, creating nests for an entire job in seconds. CABINET VISION's nesting solutions offer superior small part handling. CABINET VISION's "onion skin and return onion skin" technology for small part handling provides maximum vacuum hold-down while maintaining superior edge finish, as well as machine times up to 50% faster than other comparative nesting solutions.

In addition to block nesting, +Router comes with a geometric nesting solution that optimizes the production of rectangular and irregular shaped parts. Parts are rotated into position and shapes are interlocked to maximize material yield. You can even nest parts inside of other parts for maximum yield.

#### +Part List Export

The +Part List Export addition makes it possible to export a PNL, CUT, or Custom CUT file to a preferred optimizer. When using the +Router, +3rd Party CAM, or +Point to Point additions these files will include the programme name for part machining that needs to be performed after cutting.

#### +Saw

The +Saw addition allows you to maximize material yield and reduce waste. Fully integrated with CABINET VISION it makes it simple to quickly convert cut lists into patterns for import directly to an NC Panel saw or into printed patterns for use by a manual sawyer. With builtin Offcut Management the system will instruct the sawyer which offcuts to deploy from job to job, maximizing material utilization. The Panel Optimizer also includes built-in links to nearly all NC saws on the market.

#### +Special

The +Special addition enables exports to specialized woodworking machines such as haunching or French miter machines.





## xOptimizer



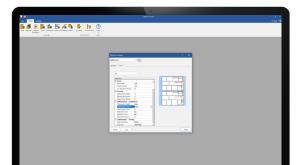
### xOptimizer maximizes panel saw yield

The xOptimizer multiplier is ideal if you are seeking to maximize material yield and reduce waste. It also increases output by eliminating the need to calculate patterns manually. Fully integrated with CABINET VISION, it allows you to quickly and easily convert cut lists into patterns for import directly to an NC panel saw (with the +Saw addition) or to create printed patterns for a manual sawyer. With built-in Offcut Management, the system will instruct the sawyer which offcuts to use from job to job, maximizing the use of material.

#### **Key Features**

- Pattern diagram print outs
- Offcut manager
- Multiple sheet size definition for a single material
- Automatically use larger sheet sizes for oversized parts
- Cost and time report
- Send optimized sheet to the CABINET VISION drawing pages





#### +Saw

CABINET VISION has been outputting to panel saws for nearly 30 years. As a result, +Saw can generate output for nearly every NC saw on the market and we use our expertise to develop links for new saws as they are commercialized.



## xRendering



## A photorealistic render that lets customers visualize the final product

Customers are much more likely to place orders with you if they can visualize how designs will look once they are built and in use in their home or business. The xRendering multiplier gives you an important competitive advantage by creating photorealistic renderings in minutes, using the latest rendering technology. You can work with your customers to make changes to designs in seconds, whether to floors, wall coverings, countertops, wood species, stain colors, knobs or other hardware. In this way customers can take ownership of designing their dream layout, helping you to drive higher value sales.

#### **Key Features**

- Realtime rendering
- Advanced rendering
- Architectural photorealistic rendering
- Cartoon rendering
- Hand drawn rendering
- Hatch rendering
- Save renders to image file
- Export COLLADA





#### +Tour

The +Tour addition uses advanced real time rendered walk throughs to guide customers through representations of how designs will look in practice.

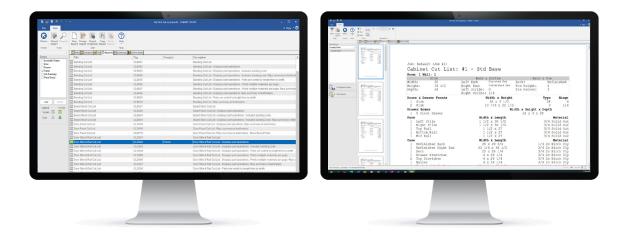




## xReporting

## Unlimited reporting capability and a custom report editor

xReporting gives you access to over 150 predefined reports as well as a custom report editor, making it easy to share clear, concise information with the relevant departments throughout your business. The xReporting multiplier saves time by allowing you to create report groups containing multiple reports that can be printed with a single click. And because it is integrated with CABINET VISION it automatically updates reports when changes are made to the job design or project specifications.



- Over 150 predefined reports
- User defined report groups
- Custom report editor
- Filter report data
- Multiple text file type exports

- User definable assembly sheets
- User definable elevation sheets
- User definable part sheets
- Export report data
- Output part list to third party optimizers

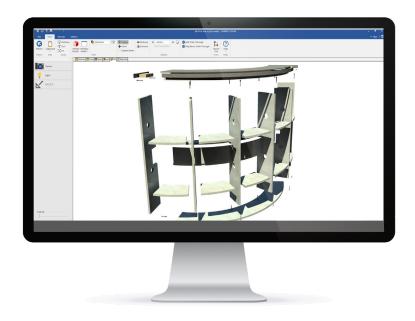


## xShaping



# Simplify the shaping of individual parts, including toe notches, cut out around columns, clip and radius corners

Not all jobs involve right angles. Wall angles, floor levels and customer preferences can pose irregular shaping challenges. xShaping provides the capability to parametrically shape assemblies, parts, and routes utilizing both simple and advanced constraints. xShaping also gives access to the CAM Editor for easily adding operations to parts for machining, such as grommet holes, electrical chases and plumbing cutouts.



- Parametric assembly shaping (advanced constraints)
- Parametric part shaping (advanced constraints)
- Parametric route shaping (advanced constraints)
- Part level CAM editor and reports views
- Split parts

- Add & modify operations on parts
- Library parts
- Replace part w/library parts or DXFs
- Exploded assembly view
- Edit part shape from room levelCombine multiple assemblies/
- toes in elevation view



Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that utilize data from design and engineering, production and metrology to make manufacturing smarter. For more information, visit hexagonmi.com.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us @HexagonAB.

#### Planit Canada

www.planitcanada.ca info@planitcanada.ca 888.824.1474